Address
ON
THE SURGERY OF THE KNEE JOINT.

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GENTLEMEN,—I propose to contrast the treatment of the principal affections of the knee joint and its immediate neighbourhood as practised at the present day with that in favour with the leading surgeons ten years ago.

The knee is a region pre-eminently fitted to be chosen for such a contrast. It is so superficial that the alterations produced in it by disease are manifest and clearly marked. It is so liable to disease and so exposed to accident that the most youthful and inexperienced surgeon is familiar with it. Its affections are also types of all surgery; not only are chronic pulpy disease of the synovial membrane of the knee and central necrosis of the head of the tibia types of similar affections which attack the other great synovial membranes and epiphyses of the body, but even genu valgum, properly understood, is a key to the comprehension of scoliosis, of flat foot, and of other leading deformities, of which a false pathology, a false etiology, and a misguided treatment are even to this day too frequently taught and practised. Let anyone study carefully the facts and opinions on chronic disease of the knee joint to be found in the handbooks and monographs of ten years ago, and he cannot fail to see that in those days, recent as they are, the rich man with chronic knee-joint disease who submitted to an operation was little better than a fool, while the poor man who was operated on in order to get independence and the means of earning a living for himself and his family was a hero. In short, ten or twelve years ago, it was the practice, and then the correct practice founded on the experience of the time, to tell a patient with diseased knee, if he was no longer quite young, that his choice lay between, on the one hand, immediate amputation of the thigh, and, on the other, a long, tedious process of treatment, very likely involving three, five, or even ten years' incapacity for following his employment, and, as likely as not, ending in amputation after all. He had also to be told that his chances of life and death after amputation were no better than two to one.[1] If the patient were a child or an adolescent, not very different information could be honestly given. Amputation at that age was comparatively safe, but excision was still very dangerous. Of ninety-seven cases collected by Bryant, twenty-seven died.

Scarcely less serious were the long periods required for treatment after excision. "Roughly speaking, the average duration of treatment (after excision) was about eight months," wrote Holmes; but this is short compared to the period during which the poor patients, almost all belonging to the lower orders, probably required treatment, but did not get it, from sheer weariness on the part of the doctor or the patient, or the parents of the latter, or from the pressure of house-committees.

Now let us turn to the present time. In the first place, it is now, practically speaking, quite safe for a surgeon experienced in such operations to open wide the knee joint and explore its every crevice; moreover, within two or three months he can expect to see every part of the joint and every muscle acting on it completely restored again. The history of the operation for suture of the patella proves this. It is true that some unfortunate results have occurred and a few fatal ones; but when we remember what a large number of sutures of the patella have been done by surgeons with little or no practical experience of such operations, and many of them quite recent converts to a faith in antiseptic surgery, after being trained to habits absolutely inconsistent with it, and, like all habits, difficult to shake off—when we bear these facts in mind, we should be surprised, not at the occasional failure of the operation, but at its frequent success. But this is not a mere question of numbers. Look at the *quality* of the success in most cases of antiseptic suture of the patella, the rapid convalescence, the perfect restoration of function, and the absence of every sign of danger from first to last.

In the matter of operations, a surgeon can speak, after all, only for himself, and for those with whose practice he is personally familiar; it is, therefore, merely a cautious and guarded mode of speaking, and not vain boasting, when I say that I feel less fear now about opening and examining a knee joint than I felt ten years ago about excising a fatty tumour. Not that I can count excisions of the knee by the dozen, but because for some years I have been week by week acting on the faith I have just declared, and have found in every bone and every joint, and nearly every cavity of the body, my confidence justified. But I never myself commenced to practise in any department of operative surgery without feeling the disadvantages of inexperience, and being, moreover, shown by the course of events what dangers are run by the patient on whom the surgeon tries his prentice hand. For instance, my first case of osteotomy suppurated and did no good. In only two instances since has a single drop of pus formed, and in these two the ultimate result was excellent and not long delayed. In fact, let us never forget to distinguish between the dangers of an operation and of the particular operator who does it.

It is no longer necessary for the honest surgeon to tell his patient with diseased knee that to submit to operation is to run a risk as great as that of fighting in a forlorn hope. On the contrary, given a patient free from consumption, not hopelessly exhausted and broken down, and not over forty years of age, I can honestly tell him that I can open his knee joint and either remove the diseased parts, or excise the joint, or amputate, according to what may be required in his individual case, with no fear of serious risk to life. And the prognosis as regards the quality of the limb, if saved by operation, is also extraordinarily improved.

What was the ordinary result of a successful operation ten years ago? A limb greatly shortened, the foot sometimes nearly on a level with the lower part of the opposite calf, the knee often greatly bowed outwards and bent forwards, almost always absolutely stiff, and if movable, weak and unreliable. Now, as to shortening, I will, if all be well, exhibit in the course of the session a series of cases, each a type of a different mode of operating suitable for cases like itself. In only one will you detect marked shortening, and that scarcely enough to be either a disfigurement or an inconvenience. In one of these cases there is excellent mobility, and no weakness therewith. How long were they in hospital after operation? An average of two or three months each. Has any sinus or sign of disease remained? No.

It remains now to indicate how these improved results can be attained. In the first place, it is now recognised that the diseased soft parts, the degenerated synovial membrane, and the infected bursæ require removal as much as do the carious portions of bone. Not a hint of this was to be read, at all events in English works, a dozen years ago. Secondly, healthy bone is, as a rule, left alone. The practice of removing sound bone or cartilage because they *might* become diseased if left should now be scouted as ridiculous, if not monstrous. Whatever healthy bone is taken away is removed for mechanical reasons—e.g., to prepare two surfaces suitable for cohesion when speedy osseous ankylosis is expressly desired, or to give access to concealed parts, or to make a channel for drainage. Thirdly, when disease has spread to the shaft of the bone, the medulla is scraped out, and the surgeon does not go on either slicing away one inch after another of the shaft, or else proceeding to amputation instead of excision. Fourthly, the effect of certain drugs on the diseased parts is known and utilised. Fifthly, the joint is opened in such a way and closed, after operation, by such means as completely restore the joint capsule and the muscles and aponeuroses around it. Sixthly, a better system of drainage has been introduced. Seventhly, dressing and after-treatment have been greatly improved. Eighthly, after excision the bones are wired. The diseased soft parts, the pulpy synovial membrane, and so much of the ligaments and bursæ as may be diseased, are carefully cut away with scissors. In many cases these are the very centre and focus of the disease, such bone and cartilage as may suffer being attacked quite secondarily, and

[1] Bryant's statistics of 119 amputations in patients between the ages of twenty and forty. See Erichsen, vol. ii., p. 272 (date 1877).

sometimes to an insignificant extent—as, for instance, was the case with the young woman whom I will show you, who recovered rapidly and with a very movable joint. This excision of soft parts has to be done with great care and thoroughness; but it is not necessary to remove absolutely every vestige of disease in order to effect a cure. In this respect tuberculosis of the joints differs markedly from cancer. As a matter of fact, tuberculosis tends to die a natural death. Time will kill local tuberculosis unassisted by the surgeon. The misfortune is that it is so dilatory in the exercise of its healing powers that very often the patient or his joint, or both, are destroyed before the disease, but when vigorously helped by the surgeon, time wakes up as it were. It has been often observed, after excision of a joint, that tuberculous granulations have sprung out, say, from a sinus left by a drainage tube, lived a short precarious existence, and then perished spontaneously, or with very little interference from the surgeon. Nevertheless, it is well to operate with the greatest possible care and thoroughness.

Next, with regard to the treatment of healthy bone, it used to be the rule to take away the patella lest it might become diseased. Some surgeons—e.g., P. H. Watson of Edinburgh—opposed the practice, but they were exceptions. Now, when once the tuberculous foci have been found and thoroughly removed, not an atom of bone should be cut away except to favour drainage, or to make opposed surfaces fit after excision. After a really complete and systematic operation on a tuberculous knee joint the fear of recurrence is small. And if we are to attempt to abolish it by removing all cancellous bone in which the return can possibly take place, amputation may as well be done at once. In fact, those surgeons who, with these views, always amputate and never excise are strictly logical. In children, more bone and articular cartilage have usually to go than in adults. I have several times completely, or almost completely, scraped out the bony part of the epiphyses, always carefully leaving the so-called epiphysial cartilage, and removing no more of the articular cartilage than was either necessary to give entrance to the sharp spoon, or was itself diseased. The cartilage on those parts of the femoral condyles which actually touch the opposed articular surface should be, as far as possible, left untouched. Any small diseased points on them may be carefully picked out. If both articular and semilunar cartilages are healthy, the latter may be left, and there will be a prospect of a movable joint.

Now with regard to drugs. Those best adapted for the purpose are solutions of sublimate (1 in 1000), and iodoform in crystals. That the latter has a really specific influence on the tuberculous *materies morbi* (it is quite unnecessary to enter into the question of whether it is or is not Koch's bacillus) can scarcely be doubted. Always should iodoform crystals be dusted over the surface operated on, and especially in the crevices and recesses of the joint, where there is most danger of portions of infected tissue having been left behind. To place the iodoform in these, the cutting spoon may itself be used, in its capacity as a spoon, not as a cutting instrument. The iodoform should be placed before the Esmarch's bandage is removed and while the joint is dry. Free sponging and douching with the sublimate solution should precede the iodoforming. It is dangerous, expensive, and not necessary to use iodoform extravagantly, and the crystals, as being less quickly and easily absorbed, are safer than the ground powder. An ethereal solution of iodoform may be used. It will penetrate into every crevice and deposit a thin layer of the drug on every surface. But it is irritating to the eyes of the surgeon and his assistants, especially if it has been long kept.

The manner of opening the joint is very important. For a thorough exploration of the knee joint a transverse incision is essential, and it must be supplemented by a perpendicular incision to open the synovial pouch, which extends upwards beneath the extensor cruris. The transverse incision may divide either the patella itself or the ligamentum patellæ; preferably the former, I think. A strong knife will cut a child's patella, but an adolescent or adult requires a saw. I prefer to divide the patella because (1) it can be so easily, certainly, and perfectly reunited; and (2, and a minor and almost superfluous argument) the section shows accurately the condition of the centre of the bone. I doubt whether a sutured ligament is as strong and trustworthy as a sutured bone. Therefore, one should, if possible, avoid dividing the lateral ligaments. When divided they should be carefully sutured at the conclusion of the operation. A short supplementary incision may be made anywhere, if required to expose any otherwise inaccessible angle or crevice. In this hospital some years ago, I introduced a new mode of opening the joint, applicable when it is not infected with tubercular disease—e.g., when excision is to be done for injury or for orthopædic purposes, and particularly applicable as an exploratory incision in cases of injury to the knee joint. It consists in a long perpendicular incision through the patella, ligamentum patellæ, and anterior wall of the upper synovial pouch. Ollier of Lyons had described and recommended this incision a few months before I did it; but, to the best of my belief, mine was the first case, and I was led to operate thus, certainly not by Ollier's paper, of which I had not then heard, but by the simple intention of obeying one of the first rules of the surgery of the limbs, which is always to prefer a longitudinal incision where it will suffice. The same operation has been recently and independently devised by Mr. Herbert Allingham. I would not, however, employ it for tuberculous disease; it does not, in my opinion, give sufficient view and access for operating thoroughly and minutely.

On the table is a specimen of a knee joint which I explored in this manner. The condyles were merely bruised. There was a compound fracture just above but not into the joint, as the exploration showed. I drained it for a few days, and if the whole limb had done as well as the joint the specimen would not be here. But the lacerated tendons and skin sloughed so extensively throughout the popliteal space and calf that there was no hope of getting a useful leg, and grave risk of inability to keep aseptic the compound fracture. I therefore amputated the thigh, and the boy did well.

When a patella has been cut in two with a knife or saw, more care is required to fit the segments accurately together than after a fracture. In the latter case they interlock like the pieces of a puzzle. In the former they readily glide, tip, or gape. Catgut does very well for the suture, and in children it can be carried through the cartilaginous patella with a strong needle. When there is prospect of a movable joint, cut aponeuroses should be united with buried catgut sutures. Cut ligaments should always be so treated. The crucial ligaments should be spared if possible, and they can be spared in most of the cases fitted for simple erasion.

Now as to drainage. Special tubes should be inserted into the superior synovial pouch. Generally the centre of the joint is best drained towards the side, the tube lying in a channel gouged for it in the surface of one or other condyle. A special lateral or postero-lateral opening may be made for it. This main tube should be large, especially if the joint has suppurated before operation. Indeed, in that case the tubes should all be large and permeate every part of the joint and everywhere the abscess may have burrowed. Secondly, one should not be in a hurry to remove these tubes. A fortnight for a case which is aseptic is not too much. And when a case is septic the tubes should be kept in until the temperature is normal, and the knee either ankylosed or amputated if it cannot be saved. Endless mischief is done by the eagerness of inexperienced people to withdraw drainage tubes.

With the use of sublimated wood-wool or turf-moss pads, and firm bandaging and strapping, aseptic cases will heal under one dressing, but a pedantic desire to obtain this is to be deprecated. If pain or a rise of temperature occur, and cannot be plainly referred to some obvious or removable cause, it is best to dress at once. Recurrent and secondary hæmorrhage used to be particularly frequent after excision of the knee. I always bandage the turf-moss or wood-wool pads very firmly down at the first dressing, and the next day relax any uncomfortable pressure by snipping with the scissors, afterwards stretching strips of strapping across any gaping interval. Sometimes, especially in children, I do not tie a single artery, but apply the dressings before having the Esmarch's band removed. Since I have used thick sublimated pads of turf moss or wood wool I have never been troubled with hæmorrhage. They should be bandaged on very firmly and evenly, and the limb kept elevated for the first twenty-four hours. Some surgeons do not use Esmarch's bandage for fear of troublesome recurrent hæmorrhage after it. No such fear need be felt when the value of such a mode of dressing and elevating as that just described is properly appreciated. I have seen great and even dangerous shock after excision of the knee without the use of the bandage. The more I see of

operative surgery, the more am I convinced that so-called shock is generally due almost entirely to loss of blood, or, at all events, that almost all that is serious and dangerous in shock is due to hæmorrhage. Another cause of shock is a long operation and its necessary accompaniment, prolongation of the anæsthesia. With a bloodless limb, one can operate faster and, at the same time, better.

One of the greatest essentials of after-treatment is perfect, continuous, undisturbed fixation. Nothing secures this so well as plaster-of-Paris. But its universal use is very wasteful of the surgeon's time, which is no more an inexhaustible quantity in a civil hospital than on the field of battle. I have therefore sometimes put up fresh excisions with movable splints for the first fortnight, by which time the wound is usually almost healed and the discharge has ceased, so that a small, thin, antiseptic dressing suffices. Over this a plaster-of-Paris case fits much better and more effectively than over a large turf-moss or wood-wool pad. During the first fortnight a weight extension may be found comfortable and satisfactory after erasion. It would be out of place in excision cases on account of the wires with which the bones should always be fixed together. Many surgeons prefer nails or screws to wires. I do not think anything can be simpler or handier or more effective than wires. Two are required, one on each side. They can be either buried permanently or arranged for removal. In the latter case they should be left for two months. Perfect osseous ankylosis must not be reckoned on under several months after any form of operation, not even when plaster-of-Paris is used continuously.

If it is asked to whom all the alterations—improvements I hope—above noticed are due, it becomes difficult to do justice to this hospital and to othere at the same time. Primarily they are the logical outcome of a belief in antiseptic surgery and of the application of a variety of means due to different inventors, not the least important being Esmarch's bandage and the sublimated pads brought here from Germany. With regard to operative measures, incisions, modes of drainage, sutures, &c., I can honestly say that most of those I use I have worked out for myself, but I must add (1) that many are the same, or nearly the same, as have been lately described by French, German, and American surgeons; and (2) that I did not divide the patella transversely until I had seen a case of Mr. Golding-Bird's. He, I believe, had long been anticipated by Volkmann, who got the start of all of us English surgeons in these matters, and who is, moreover, a genius. To Mosetig-Moorhof of Vienna, more than to anyone else, we owe the anti-tuberculous use of iodoform. I was using pure carbolic acid for the purpose when I came across Mosetig-Moorhof's papers, and I had good results with it: but iodoform has obvious and great advantages over a drug so caustic. I used to entirely cover the dressings with elastic bandage before the turf-moss pads came over. While house surgeon in Birminghan, I learnt from Gamgee the value of pressure. Some British surgeons have also been working successfully with erasion, especially Wright of Manchester. If I needed anything to confirm my faith in the methods I have described, enough could be found in a recent paper by Professor Ollier of Lyons, the first authority in France on this subject, and second to none in Europe. The procedures he recommends are very similar to those in use at this hospital.

Such, gentlemen, is a brief outline of what can be done, and what I believe ought to be done, in cases of chronic knee-joint disease fitted for operative treatment. It is but an outline. Each division of the subject would suffice for a complete paper, but I think you would now be more wearied than you are, had my address been devoted wholly to some single question, such as how to drain the knee after excision, or how to dress it after erasion. I would have liked to have described Annandale's operation for subluxation of the knee, which I have tried. It consists in suturing the too movable semilunar cartilage to the superjacent fascia lata and aponeurosis. Concerning simple drainage of the knee there is much to be said. Of suture of the fractured patellæ you must have heard and read *ad nauseam*. Amputation through the knee joint is a subject of great interest, of which our fellow-member, Mr. Pick, has had exceptional experience. I will only say that I prefer Gritti's method to any other. Then there are many diseases commonly called of the knee, but really affecting neighbouring structures—e.g., genu valgum, genu varum, and also contractures and paralyses. And what a valuable addition to the surgeon's means is MacEwen's osteotomy for genu valgum. There are four cases of double genu valgum in the hospital just now, representing six MacEwen's osteotomies and two osteoclases for genu valgum. I shall be happy to show them to anyone.

But time, which can bring even tuberculous processes to an end, must stop even this long and, I fear, wearisome address. I would like, in concluding, to ask you not to imagine, because I have spoken almost entirely of operations, that I recognise no other surgery of the knee joint. Sea-air, rest, plaster-of-Paris, and more than one variety of splint are valuable means which no reasonable person should underrate. But to-night I thought I could interest you more by talking about other things; that is all. It would ill become me to sit down without referring to my predecessors in this chair—to those who, not less than your election, have made it an honour to preside here. We are a suburban Society—the most successful and important suburban scientific Society in the world, I will venture to boast; and in what respect have we been more successful than in our past presidents? I have neither the learning nor classical culture of Dr. Vinen, nor the wide knowledge of Dr. Thudichum combined with originality. Nor can I claim the natural dignity and charm of manner of Mr. Hemming, or the perfect common sense and experience of Mr. Lawrence. But I hope and believe that I do share with Dr. Alderson in feeling a most intense desire for the success of this Society, and appreciation of the honour you have done me. Such feelings have been the guiding star of my immediate predecessor. They have shone out as plainly and brightly as any lighthouse lamp or beacon-fire, visible not only to our late captain himself, but to every one of his crew. And now the helm is handed over to me, I have but to remember the past year in order to carry in mind a chart for the future.

ON FOUR CASES OF ESTLANDER'S OPERATION, OR THORACOPLASTY.[1]

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IT is now ten years since Estlander published his first account of the operation which bears his name, and is also known as Thoracoplasty. It has been frequently practised by many surgeons, and it is with a view of eliciting the experience of others that I venture to place on record brief notes of four cases in which I have performed it.

CASE 1.—My first case was that of E. P——, a patient at the Royal Hospital for Diseases of the Chest. When I first saw her in May, 1886, she was nine years of age, and was under Dr. Gilbart Smith's care. Her history was that two years previously she had scarlet fever, which was followed by right-sided pleurisy. She was in the hospital under Dr. Finlay's care in September, 1884, when she had a superficial abscess communicating with the pleural cavity through the ninth intercostal space. A portion of the ninth rib was excised, and the pleura was drained. She left the hospital in February, 1885, and after that she was for a considerable time in the London Hospital. She was readmitted to the Royal Chest Hospital in May, 1886, when her illness had lasted nearly two years. She was then a thin delicate-looking child, with a pulse of 100 and breathing 32 to the minute. The right side of the chest was much retracted, and did not move with respiration. There was a profuse discharge of pus through a sinus over the eighth space in the anterior axillary line. The heart's impulse was felt in the fifth left space one inch and a half outside the left nipple; the liver was not enlarged; the urine did not contain albumen. The left side of the chest was large, and the left lung appeared to do all the respiratory work. On May 11th, 1886, I explored the cavity, and found it was an extensive one, reaching up far above the opening of the sinus. I made a longitudinal incision up from the sinus, and removed portions of the fourth, fifth, sixth, and seventh ribs, about one inch and a half of each, and inserted a large drainage tube. By May 28th the wound had healed except where the drain lay, and the discharge, sero-purulent in character, was very small in amount.

[1] Read before the Medical Society of London on Feb. 6th.

She left the hospital on Aug. 24th much improved in her general condition, and only having a few drops of discharge per diem. She was readmitted under Dr. Gilbart Smith in January, 1887, as the discharge had increased in amount, and there was no sign that the cavity was closing entirely. There was very marked flattening of the right chest, whether viewed in front, behind, or laterally; and the sternum was twisted so that the xiphoid cartilage was an inch to the left of the middle line of the body. There was no sign of albuminoid disease, and the patient's general condition was decidedly better than before the previous operation. On Feb. 7th I made a vertical incision anterior to the previous one, and removed portions of the second, third, fourth, fifth, and sixth ribs, and of the enormously thickened pleura lining them. I divided the ribs in front and behind at the limits of the cavity, and removed the thickened pleura for the same extent as the bones. This operation was a more severe one than the former. She recovered well, and the pleural cavity has entirely closed. The child's general condition is excellent, and a wonderful improvement upon what it was. She is no longer anæmic, and her only symptom is dyspnœa on exertion. The right side of the chest is remarkably retracted.

CASE 2.—This patient was also under the care of Dr. Gilbart Smith in the Royal Hospital for Diseases of the Chest. He was a boy nine years of age when he was admitted on Jan. 24th of last year (1887). The history of his case was that he was taken ill two years before with pain and then enlargement of the left side of the chest. The side burst in two places and discharged a large quantity of pus, and these sinuses had discharged freely up to the present time. He had been in the London Hospital on three occasions; no operation had been performed. When admitted he was a thin, pale, anæmic, very weakly-looking, undersized lad. The left side of the chest was retracted and motionless, there was a sinus in the second space two inches from the sternum, and another in the sixth space four inches from the sternum, both of which discharged pus freely. The liver was considerably enlarged, its lower edge being four inches below the costal margin; its surface was smooth. The splenic dulness measured three inches vertically, and the edge of the spleen could be plainly felt. The urine was pale, acid, sp. gr. 1008, and contained one-third in volume of albumen. The sinuses were dilated with laminaria tents and about ten ounces of laudable pus evacuated; drainage tubes were inserted, and the cavity was daily syringed out. From this time the boy began to improve in appearance and colour, and the amount of discharge lessened; but after two months of this treatment it became evident that the cavity was not contracting, and that nothing further was to be hoped for from these means. Accordingly, on March 28th I was asked to see the lad with a view to operation. Finding a considerable cavity within the left chest, I made a vertical incision about four inches long, reflected the soft parts and periosteum, and removed a considerable length of the second, third, fourth, fifth, and sixth ribs from their junction with the cartilage in front to the posterior boundary of the cavity, and then cut away with scissors the very thick pleura inside these ribs. The cavity and wound were well irrigated with corrosive sublimate solution (1 in 5000), a large drain was introduced, and the wound closed. The boy stood the operation well; the wound healed by first intention, and the discharge from the tube was only serous. He left the hospital on May 4th, very much improved in every way: he had gained flesh and strength, there was less albumen in the urine (only a trace), and his liver was smaller. At the present time the liver is only just below the costal margin, and the urine is free from albumen; there is slight clubbing of the fingers. The left side of the chest is greatly flattened; on all sides the spine shows a double curve, concave to the left shoulder and convex to the left hip, and there is some amount of rotation of the vertebræ. There is still a narrow sinus two inches long, which discharges a small quantity of serum or sero-pus.

CASE 3. — E. W——, a boy twelve years of age, was sent to me by Dr. Trotter of Coleford, and was under my care in the London Temperance Hospital. When six years of age the boy had measles, and during convalescence was seized with pneumonia and pleurisy, with effusion on the left side. Paracentesis was performed twice, a large quantity of serum being removed each time. Further surgical interference was refused, and about a year later the empyema burst externally, and had continued to discharge freely ever since—a period of about five years. On admission he was emaciated, anæmic, very delicate looking, with extremely marked "clubbing" of the fingers. Tongue healthy; teeth very carious. Pulse and heart sounds feeble. The left chest was completely fixed, the lower ribs being one inch and a half below the corresponding ones on the right side. The left front as low as the nipple was considerably sunken. The right chest was large, expanded well, and appeared to do all the respiratory work. There were three sinuses, one in the third interspace close to the sternum, discharging much creamy pus, one in the fifth, and a third in the seventh interspace; these latter discharged but slightly. The heart's beats could be felt in the third, fourth, and fifth right spaces, nearly as far out as the nipple. The measurement from the seventh dorsal vertebra round the chest to the tip of the ensiform cartilage was twelve inches and three-quarters on the right side and nine inches and three-quarters on the left; the dorsal spine was curved laterally—concave to the left. Urine acid; sp. gr. 1015; no albumen.

Operation, July 14th, 1887.—The three sinuses were connected by an incision, and were found to lead into a cavity under the pectoral muscle and outside the ribs, from which there was an opening into the pleural cavity through the second space. The soft tissues and periosteum were separated from the ribs from the second to the seventh inclusive, which were then removed near the spine behind and at their junction with the cartilages in front. The pleura lining the ribs was more than half an inch thick, and very tough; it was freely excised; a good deal of thick pus was evacuated from the pleura. The operation was attended with considerable hæmorrhage, which was controlled by irrigation with mercuric chloride solution (1 in 2000). A counter-opening was made in the post-axillary line, and a large drain was inserted, and the first incision was then closed by sutures. The operation was a severe one. Soon after he was returned to bed the dressings were found soaked in blood, so the house surgeon removed them, again irrigated the cavity, and reapplied the dressings more firmly than before. I saw him a few hours later (11 P.M.), and found him blanched, faint, very sick, and complaining much of thirst; the dressing was saturated, but not with pure blood. Ether was administered, the cavity was again well irrigated, and a large pad of alembroth gauze and wool was firmly strapped on. He was ordered seven minims of tincture of opium, and a nutritive enema every six hours. He passed a quiet night, and was better next morning, but was unable to retain anything on the stomach. He was again dressed on July 16th; the discharge was then wholly serous, and a smaller tube was introduced. The sickness ceased on July 17th, and from that time the boy continued to improve. He left the hospital on Aug. 15th; the wound in the chest had almost entirely healed, leaving a small sinus discharging about one drachm of pus in the twenty-four hours. He was much stronger and better than before the operation; his weight was 3 st. 4 lb. The measurement of his chest, taken as before, was ten inches on the left side and fourteen inches on the right.

Dr. Trotter has kindly sent me the following report of his present condition. Soon after he left the hospital a small abscess formed in the left axilla, which was opened. A short sinus formed here, and another at the upper end of the incision two inches long, running up backwards and outwards. Both of these sinuses led down to bare bone. On Nov. 11th, a sequestrum of rib escaped, and the sinuses are now soundly healed. For the rest, Dr. Trotter speaks of the operation as "a great success." The boy has gained in weight, has lost his anxious expression, and can now walk up a stiff hill without any distress. He now weighs 3 st. 8½ lb.

CASE 4 was a servant girl twenty-five years of age, who was admitted into the Royal Hospital for Diseases of the Chest on July 28th of last year under Dr. Hensley. She stated that she was attacked with pleurisy in July, 1884; six months later the side was aspirated, and pus withdrawn. Three months after that she went to St. Thomas's Hospital, where an opening was made close to the angle of the scapula, and a piece of a rib was excised. She then attended as an out-patient from November, 1885, to September, 1886, when she was again admitted, and four or five portions of rib were removed from the posterior opening. After three months she went to a convalescent home, which she left in April of this year, not so well in herself, and with an increasing amount of discharge. On admission she was emaciated, anæmic, and delicate-looking. She had copious night sweats, and an evening temperature between 100° and 101°, which fell to normal in the morning. The right side of the chest was considerably flattened, and the spine

was markedly curved. A fistulous opening existed at the angle of the scapula behind, and another in the seventh intercostal space in the nipple line. From these sinuses there was a free discharge of fetid pus, and a probe passed along them entered a considerable cavity. The heart's impulse was felt in the fifth interspace below the left nipple. The liver was enlarged, its lower margin being three inches below the costal margin; the urine was free from albumen. On July 30th eight ounces of fetid pus escaped from the cavity, which was subsequently well washed out with a weak carbolic solution. For the next few weeks she improved, gained in weight, and the discharge lessened; but on Sept. 20th it was noted that for the last three days there had been considerable hæmorrhage from the sinuses, and that the purulent discharge was very fetid. I then saw the case, and, with the patient under chloroform, explored the cavity, found it to be large, and proceeded to excise the ribs. This was done through an incision about ten inches long in the mid-axillary line. Considerable lengths of the ribs from the second to the ninth inclusive were removed. The total length of bone removed was fifty-four inches, giving an average of six inches to each rib. The pleura was nearly an inch thick, and this was freely cut away with scissors. The whole cavity was well irrigated with corrosive sublimate solution (1 in 2000), and the wound closed. After recovery from the chloroform the patient became very excited, and one-sixth of a grain of morphia was given hypodermically, after which the patient slept quietly. At 9.45 next morning she suddenly rolled over on to her right side, became collapsed, and died in four minutes, in spite of a stimulant enema and injections.

The post-mortem examination was made by Dr. White, who found the pleural cavity empty, and the remains of the right lung as a firm, airless, fibrous cord firmly bound down to the spine from the apex of the chest to the diaphragm. The left lung was large, and reached over to the right side. The heart was universally adherent to the pericardium by old adhesions and displaced to the right, so that it formed part of the inner boundary of the pleural cavity. There was a considerable layer of subpericardial fat, and the muscular tissue of the heart was pale and flabby. The liver weighed 48¾ ounces, and was fatty. The right kidney contained a small abscess in the cortex. No other lesion of importance was found.

These cases illustrate the conditions under which this operation should be performed. Thoracoplasty must be clearly distinguished from the much simpler procedure of removal of a small portion of one rib for purposes of drainage. It is, as its name signifies, a "plastic" operation. We are all familiar with cases of empyema which refuse to heal in spite of long-continued free drainage of their cavities. The compressed lung has expanded to the full extent possible to it; the mediastinum has been displaced; the diaphragm has risen, and the chest wall has fallen in until the ribs are in contact, and yet a cavity remains. To occlude such a cavity by a growth of granulations is impossible, and the patient slowly advances to the grave, worn out by the continued suppuration, or is more suddenly carried off by acute tuberculosis or cerebral abscess. It is to save these lives that Estlander devised this operation, and it should be restricted to such cases, and not undertaken until ample time has been allowed for the natural cure of the empyema to be accomplished—a cure that most often results from a well-devised drainage operation. It is important to emphasise this point, lest the success attending it should tempt the surgeon to perform the operation merely to *save time*. The severity of the operation is such that it is only justifiable when it is plain that it is demanded to *save life*.

As to the operation itself, I need add but few words to the descriptions already given, and these shall have reference to but three or four points. And the first is the necessity for carefully exploring the cavity to be treated either before the operation or as a first step in it. This necessity arises from the fact that the operation must be specially planned for each case, for its success depends upon the whole of the unyielding bony boundary of the cavity being removed. It is not a matter of removing a certain length of a certain number of ribs, but all the ribs lying in the wall of the empyema must be excised. The surgeon should therefore first of all determine the vertical and the antero-posterior extent of the cavity. The best way of doing this is by the finger, and I prefer, first of all, to enlarge the fistulous opening until the finger can be freely passed in to explore the cavity; but of course much information can be obtained by intelligent probing. The ribs to be removed have generally been exposed by raising a flap of the soft parts over them, and Mr. Godlee in his valuable Brompton Lectures advocates that plan. I have not found this necessary; a single vertical incision is all that is required. Raising a flap makes a more extensive wound; but another and perhaps more grave objection to it is that it is often impossible to decide beforehand exactly how far the cavity extends in all directions, and therefore how large the flap should be. I strongly recommend a single vertical excision through the skin and muscles in preference to raising a flap. To excise a rib, the periosteum should be separated all round by a raspatory, and if a long length has to be removed, it is better to cut it away in two or even three pieces. If the cavity extends far back towards the spine, it will be found convenient, after removing the front portion of the rib in the usual way, to remove the posterior part from the inside, peeling the thickened pleura off the bone, and applying the cutting forceps from within the chest; this simplifies the operation, and disturbs the soft parts less than the other plan. Should the cavity reach high up, the second rib may be safely removed; but of course the first rib must not be touched owing to its close relation with the subclavian vessels. I would here again lay stress upon the necessity of carefully removing *all* the bone in the outer wall of the empyemic cavity, so that only a soft and easily collapsing wall of soft tissues is left. And not only must the bone be fully removed. Lining the ribs, in these cases, dense cicatricial tissue, half an inch or an inch in thickness, is found, which is almost as unyielding as bone; it, too, must be entirely cut away with scissors. The hæmorrhage attending the operation may be considerable. If care is taken in peeling off the pericostal membrane, the intercostal vessels should escape injury; but many branches are cut, and they bleed freely. If any arteries spurt, they should be seized in compression forceps. For the rest, it is best to complete the operation as quickly as possible, and then thoroughly irrigate with a weak corrosive sublimate solution. The skin wound should be closed with sutures, and, if necessary, drainage may be secured by means of a special incision. Thoracoplasty is a much more severe operation than the mere drainage of an empyema; the shock produced is considerable, and great care is necessary in the after-treatment. Whether my last case could have been saved if greater care had been bestowed upon her after the operation I cannot say; but certainly, had we known the condition of her heart, it would have been wrong to submit her to such a severe operation as I performed upon her. Not *all* cases of chronic fistulous empyema, therefore, are to be treated by thoracoplasty, for its danger to life must negative it when there is serious visceral disease and the vital powers are at a very low ebb.

The results of the operation may be either partial or complete success. In some cases, as illustrated by Case 2, a sinus remains behind; but this is a much smaller surface than previously suppurated, and the condition of the patient is to that extent improved. Such a result, however, cannot be called very satisfactory; it is, I believe, due to the operation not having been sufficiently complete, some part of the bounding wall of the cavity having been left rigid and unyielding. I believe full success is only to be anticipated where all physical obstacles to the entire obliteration of the cavity have been removed. The cases of complete success, like my first and third cases, will become more frequent as the operation is more completely executed. Such patients have a great deformity of the chest, but the cessation of all discharge is quickly followed by great improvement in the general health. It is to be hoped that the cases requiring thoracoplasty will become fewer and fewer as the surgical treatment of empyema is resorted to more early and is more efficiently carried out. But for a small residue of very chronic and otherwise incurable cases of fistulous empyema, Estlander's operation, when very thoroughly carried out, offers a good chance of cure. When once the necessity for the operation is recognised, the sooner it is carried out the better, for marked exhaustion or serious visceral disease renders the operation too dangerous to be recommended.

ZANZIBAR.—It has been decided to establish a German hospital at Zanzibar. A suitable building and site having been already acquired, it is hoped that the hospital may be in working order by the middle of this month.

CASE OF EXTRA-UTERINE GESTATION.

BY C. E. GOODING, M.D. MCGILL COLL., M.R.C.S.

UNFORTUNATELY cases of extra-uterine gestation do not occur so rarely as perhaps to warrant a single instance being put on record by itself. It is only on account of some specially interesting features which it presented that I venture to report the following case.

Early in December, 1885, I was called to a Quadroon woman, aged forty-nine and unmarried. She was suffering from well-marked symptoms of acute cystitis, following apparently on exposure to cold and damp a few days before. She also complained of a constant and severe pain, with great tenderness in the right iliac region, shooting thence down the thigh of the same side. Some fulness and diminished resonance on percussion could be detected in the right iliac fossa, and extending slightly beyond the middle line of the abdomen. Conjoined vaginal examination revealed a hard, non-fluctuating, and very sensitive swelling, about the size of a cocoanut, rising out of the pelvis on the right side. The uterus, which was of normal depth, was pushed over to the left, but moved separately from the tumour. The latter was diagnosed as ovarian in its origin, and from its density probably fibroid or dermoid. Under appropriate treatment the vesical symptoms entirely subsided in a couple of weeks, and the patient was then lost sight of for some time, although told to report herself, should other symptoms due to the presence of the tumour develop. Thirteen months after, in January, 1887, she was admitted under my care in the St. Philip's Almshouse. She brought with her three bodies slightly encrusted with phosphates, which she had passed per urethram during the previous week, and which were at once recognised as the tibia and two ribs of a child apparently at or near full term. I learnt then that since I had seen her she had had several attacks of cystitis, and been under the care of more than one medical man, with but very partial relief to her symptoms. The following history was now elicited: Began to menstruate at fourteen, and was regular until twenty, when her first and only child was born. With the exception of very slight occasional intermissions, she continued regular until ten years ago. Her menses then ceased for five or six months, but although she had exposed herself to the chances of conception she did not consider herself pregnant. She declares positively that she did not observe any of the usual signs of pregnancy, but admits that she was unusually fat about this period. From this time, however, she has never felt strong, being easily tired and very subject to pains in the back and lower part of abdomen, and running down the leg on the right side. After this interruption her menses returned and were fairly regular until they ceased entirely three years ago.

The woman's condition on admission was as follows:—She has become very much emaciated since last seen; is suffering with chronic cystitis; micturition very frequent, and the act accompanied with intense pain; bladder when sounded is found to contain a large number of bones; dulness over tumour has lessened in extent, and tumour itself per vaginam feels more soft and yielding; is suffering with hectic, and has an evening temperature in the neighbourhood of 101°.

She was ordered tonics and good diet, and the bladder to be washed out frequently with antiseptic injections. Under this treatment her general condition improved, and after two or three weeks (during which time she had passed a couple more small bones), on consultation with Dr. Archer I decided to operate. This was done on February 12th, Dr. Archer assisting; Dr. Greaves administered ether, and Dr. Shepherd also was present. No injection was used to distend the bladder on account of the manifest communication existing between that viscus and the fœtal cyst. The urethra was first dilated until it admitted the index finger, and the bladder was then opened by an incision in the median line above the pubes. With the two index fingers—one passed through the urethra, and the other through the abdominal wound—all the bones were removed through the latter. The bones were found partly in the bladder and partly in a cyst—about the size of the fœtal head at term,—which communicated freely with the fundus of the bladder on the right side through a fistulous channel large enough to easily admit the finger. The bladder and cyst were next washed out thoroughly with a full stream of warm carbolised water in order to remove any remaining detritus. The opening into the bladder was left unsutured, and that night all the urine passed through it.

The next morning a catheter was tied into the bladder through the urethra and retained for one day. After this all the urine passed per urethram, though it was several weeks before complete control over the sphincter vesicæ was established. After the operation there were no bad symptoms. The bladder was washed out with antiseptic injections until its coats had regained their normal condition. In six weeks the abdominal opening had healed all but a little fistula at the upper end, through which a probe could be passed directly backwards for about four inches. A small bit of loose bone was now detected near the bottom, and its removal was soon followed by the healing of the sinus. At the end of three months she was discharged, "feeling better and stronger," as she expressed it, "than she had for many years."

The majority of all cases of extra-uterine gestation end in the death of the mother through rupture of the cyst and consequent hæmorrhage, which usually takes place about the third or fourth month. Sometimes the fœtus dies in the early months of pregnancy without rupture of the cyst; then the fluid parts are absorbed and the remainder dries up and becomes quiescent. In a smaller proportion of cases the fœtus does not perish until the full term of gestation, and then the ultimate result varies greatly. The fluid contents of the cyst may dry up, and the fœtus (becoming converted into a substance resembling adipocere) remain quiescent for an indefinite time. On the other hand, the cyst with its contents may undergo suppuration, and the mother die from the violence of the inflammatory process. Should, however, the course of inflammation be less intense, an effort is made to throw off the fœtus (which has now become a foreign body) by the formation of a fistulous canal leading from the cyst. This most frequently opens into some part of the intestines, or through the walls of the abdomen, or more rarely into the vagina or bladder. The case recorded above is remarkable, as affording an example of that exceedingly rare termination of an extra-uterine pregnancy—viz., an attempt on the part of nature to effect a cure by getting rid of the contents of the cyst through a fistula into the bladder. It is also interesting from the slight amount of constitutional disturbance with which the growth of the fœtus in its unusual position was accompanied, and from the entire want of those subjective and objective signs of pregnancy, the absence of which prevented the woman and those about her from entertaining the slightest suspicion of her being pregnant.

THE TREATMENT OF CYSTIC GOITRE.[1]

BY T. MARK HOVELL, F.R.C.S. EDIN.,

SENIOR SURGEON AND AURAL SURGEON TO THE HOSPITAL FOR DISEASES OF THE THROAT; JUNIOR AURAL SURGEON TO THE LONDON HOSPITAL; LECTURER ON DISEASES OF THE THROAT AT THE LONDON HOSPITAL MEDICAL COLLEGE.

MY reason for bringing forward a method of treatment by no means new is that, although it is mentioned in all the principal English and American works on Surgery, the prominence it deserves is not accorded to it, and recently cases have been published in which the treatment adopted has entailed serious risk to the patient, whose safety would not have been thus unnecessarily jeopardised had the measures I am about to describe been adopted.

The treatment which I advocated is that introduced by Sir Morell Mackenzie in a paper read before the Hunterian Society on Jan. 22nd, 1872, and published by him in THE LANCET of May 11th, 1872 (vol. i., p. 642).[2] His method briefly consists in tapping the cyst, and when the fluid has been withdrawn injecting a solution of perchloride of iron through the cannula of a syringe and allowing it to remain for a certain time, so as to convert the cyst into a chronic abscess. It is essential that the trocar should be introduced at the most dependent part of the tumour to ensure subsequently efficient drainage, upon which greatly depends the success of the operation, and it is an advantage to make the puncture where the cyst wall is thin, provided this condition is found in the position mentioned. Care must be taken to avoid a place traversed by a large vein, and when practicable it is well to introduce the trocar as near the mesial line as possible. The spot having been selected, the skin should

[1] Read before the Hunterian Society, April 13th, 1887.

[2] See also Birmingham Medical Review, vol. iv., 1875.

now be frozen by means of an ether spray, and when anæsthesia has thus been produced, a trocar with silver cannula attached should be passed through the wall of the cyst, the trocar being withdrawn as soon as the cavity is reached, and the cannula pushed further in by means of a blunt-pointed plug. For a large goitre I select a cannula two inches in length, because I have found that if it is shorter it is apt to slip out of the cyst, in which case there is often difficulty in reintroducing it by means of the plug, in consequence either of the cyst wall contracting and thereby causing the hole in it to be no longer opposite the opening in the skin, or from the aperture in the cyst wall having closed. When this occurs it is necessary to again use the trocar. For smaller goitres a cannula of porportionate length should be employed. It is not necessary to use a very large cannula; the sizes I employ correspond to Nos. 7, 8, and 9, English catheter gauge. Those smaller than No. 7 are apt to become blocked with discharge, whereas those larger than No. 9 are unnecessary in ordinary cases; should a larger cannula be required during the subsequent treatment of a case, it can easily be introduced. The cannula having been inserted into the cyst, it should be secured in position by a tape passed round the neck. The plug should be then withdrawn and the contents of the cyst allowed to escape, care being taken not to squeeze the cyst lest air should be sucked into its cavity. One or two drachms or more, according to the size of the cyst, of a solution of perchloride of iron (two drachms of the salt to an ounce of water) should be now injected into the cavity by means of the syringe just described, held vertically, and the plug reintroduced to prevent the solution from escaping. The reasons for using the aqueous solution of the salt as mentioned are that it is more astringent than either the tincture or liquor ferri perchloridi (B.P.), and it is devoid of the free hydrochloric acid which they contain. The syringe[3] used for this purpose has its nozzle fixed at an obtuse angle with the cylinder, the object of this arrangement being to allow any air which may be in the syringe, when held vertically, to rise to the top of the solution, and therefore render impossible the injection of air into a vein. This occurrence is further prevented by a button placed on the piston of the syringe above the cylinder, the button being screwed down for about an inch after the cylinder has been filled with the solution for injection, causing, by this means, the piston to be about an inch shorter than the cylinder, and consequently incapable of emptying it. The nozzle of the syringe is made to taper to the point in order to allow it to accurately fit any cannula which may be used for this operation. The solution of iron having been injected into the cyst, it should be allowed to remain there for seventy-two hours. During this period the cyst will refill to a greater or less extent, and if inflammation has been set up, it will be marked by pain and tenderness over the tumour, and there may, in addition, be signs of slight inflammation in its immediate neighbourhood. Whilst the cyst is swelling care must be taken to loosen the tape which holds the cannula to a corresponding degree, otherwise the head of the cannula will be pressed against the skin and may cause it to slough; the tight tape will also greatly add to the patient's discomfort. During the after-treatment of the case, tightness of the tape may generally be considered to indicate distension of the cavity of the cyst consequent upon the escape of pus being retarded by the cannula having become obstructed. If on withdrawing the fluid at the end of seventy-two hours it is found to contain blood or to show no signs of suppuration, an injection of iron must again be made and retained in the sac for seventy-two hours as before by means of the plug, this process being repeated until suppuration has been produced. Poultices should then be applied, and in some cases the plug may be permanently removed, but usually it is better to keep it in position for a few days in order to retain some pus in the cyst and increase thereby the amount of inflammation. The quantity of pus, however, which is retained should not be large, and to ensure this the plug must be removed several times during the day, to allow the discharge which has collected to escape. Whilst the plug is retained in the cannula the temperature generally ranges between 100° and 103° F., but quickly falls after the plug has been removed and the free exit of pus permitted; but should it not do so (and from the character of the discharge it appears unnecessary to keep up the inflammation), the cyst should be washed out several times a day by the injection through the cannula of tepid water containing some antiseptic.

Throughout the subsequent treatment of the case it is most important that thorough drainage of the cyst should be maintained; and it should be constantly borne in mind that pyrexia persisting after the plug has been removed from the cannula, or a sudden elevation of temperature during the later stages of the case, is almost invariably due to the cannula being blocked, and consequently causing retention of pus in the cavity of the cyst. With the view of preventing this occurrence I have for some years past employed a piece of Ellis's drainage tube, which consists of a piece of silver or plated wire wound spirally to form a tube. I usually allow the turns of wire to remain touching one another, but in some cases it is well to slightly separate them, which is easily done by making gentle traction. To apply it, I select a piece of tubing which is a size smaller than the cannula, and consequently passes easily through it; and having ascertained the precise length of the cannula by measuring the plug belonging to it, I introduce the tubing until it projects about half an inch beyond it into the cyst, and then secure it in that position by fastening its other end to the tape around the patient's neck. By this means although the more solid portions of the discharge gathers round the cannula and the piece of tubing which projects from it and there remains, the fluid portion readily passes between the coils of wire into the lumen of the tube and thence away. To further ensure efficient drainage it is necessary to wash out the cyst with tepid water, to which an antiseptic may be added several times a day, and before doing so to remove the Ellis's tubing. In some cases the mere injection of water into the cyst is not sufficient to entirely remove all the thicker portion of the discharge, which, carried by the outward flow of the water, collects around the inner opening of the cannula and blocks it. When this occurs, a fine probe introduced through the cannula as soon as the syringe is withdrawn, and moved about so as to keep the end of the tube clear, will cause the previously obstructing pieces to come away with the water. It is useless to attempt to employ Ellis's tubing without a cannula, or to leave it long in position without being removed, because the granulations grow between the coils of wire and choke the lumen of its tube. Care must be taken to bend the inner cut extremity of the wire so that it does not prick or scratch the wall of the cyst. Constant retention of a certain amount of pus may be caused by the cannula projecting too far into the cyst, and consequently only allowing the escape of the overflow; the existence or not of this state of affairs can be easily determined by removing the cannula and noticing its colour, the portion which projects into the cyst being always more darkly stained than that which is in contact with the tissues.

It sometimes happens that after a few weeks the discharge becomes thin, and no appreciable diminution in the size of the cyst takes place from week to week. This condition is usually produced by want of tone on the part of the patient, causing the granulations to become flabby and the healing process generally less active. To remedy this, in addition to tonics and a more generous diet, it is well after each time the cyst is washed out to inject a solution of chloride of zinc (fifteen to thirty grains to an ounce of water) into the cyst, and allow it to escape through the cannula, and to continue to do so until, from the ready way in which the walls bleed when touched with a probe and other indications, it is seen that the granulations have reassumed a healthy aspect. A cannula should be retained in the cyst until its cavity is completely obliterated. Provided that efficient drainage is obtained through the cannula which was at first introduced, it is a mistake to remove it until the cyst has contracted around its inner extremity and the granulations have begun to block up the aperture. When this takes place the cannula should be replaced by one of the same gauge, but not more than a quarter of an inch shorter, which should likewise be retained until the granulations begin to obstruct its inner orifice, when it should be replaced by a cannula again not more than a quarter of an inch shorter than the former one. A cannula should be introduced on this system until the sinus made by the first cannula becomes too short to retain it, when the wound may be left to granulate. Sir Morell Mackenzie sometimes uses a silver cannula with a movable shield, which can be fixed at any part by means of a screw. In this way as the cyst contracts the tube can be shortened, and its length accurately adjusted to the requirements of the case. For patients who are not well off it is convenient, because it renders a number of tubes un-

[3] The syringe may be obtained from Messrs. Mayer and Meltzer, 71, Great Portland-street, W.

necessary; but it has the disadvantage of projecting further in front of the neck in proportion as it is withdrawn from the cyst, and this causes a little inconvenience in the arrangement of the dress and the application of poultices. A multilocular cyst should be treated in the same way as a simple cyst; but if it is found that pus is retained in any one of the cavities, a cannula must be passed directly into that cavity at its most dependent part, and the same treatment adopted for it as is employed in the case of a simple cyst. A cyst containing a large amount of calcareous matter in its walls can only be effectually treated by excision; but this operation ought not to be performed unless the symptoms produced by the tumour demand surgical interference.

The following cases illustrate the mode of treatment which I have described. The accompanying woodcuts faithfully represent the appearance of the patients before and after treatment.

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

CASE 1.—Marie K——, aged thirty-four, single, first noticed a swelling in her neck twenty years ago. During the last eight years she has had a certain amount of dyspnœa whilst walking fast or going upstairs. Her voice first became weak five or six years ago, and during the last four years it has remained much in its present condition. There is now paralysis of the left vocal cord, which is in the cadaveric position. The tumour has increased very much in size during the last three years, so much so that for this period she has been unable to wear a collar. The goitre had never been surgically treated before she came to the Throat Hospital. On admission the circumference of her neck measured nineteen inches. The cyst was tapped on Dec. 16th, 1886, and twenty-one ounces of dark-brown fluid withdrawn. (See Figs. 1 and 2.)

CASE 2.—Mrs. C——, aged thirty-three, first noticed the enlargement in her neck nineteen years ago; the goitre was then about the size of a hen's egg. For several years it

did not increase much in size. About six years ago the swelling began to enlarge, and continued to increase slowly. She married three years ago, and was confined ten months afterwards, a marked increase in the size of the tumour being noticed after the birth of the child. Mrs. C—— states that during the last twelve months when she has run downstairs she has felt the fluid moving about "like water in a bottle." During the three months previously to her admission into the Throat Hospital the increase in size was very great, so much so that she was obliged to enlarge the collar of her dress almost every Saturday in order to enable her to wear the dress on the Sunday. The cyst was tapped on Jan. 31st, 1887, and ten ounces and a half of bright-red fluid withdrawn. (See Figs. 3 and 4.)

Having described Sir Morell Mackenzie's method, it may not be out of place to take a glance at the various other plans of dealing with cystic goitre which have been tried or recommended.

In THE LANCET of July 3rd, 1886, is an account of a cystic goitre treated by Dr. C. T. Vachell of Cardiff by "shelling out." The patient was a woman aged twenty-three, who had a tumour about the size of a cocoanut occupying the position of the right lobe of the thyroid gland and passing somewhat over the middle line of the neck. Fluctuation could be felt all over the tumour. About three weeks before admission a teacupful of bloody serous fluid was withdrawn by a trocar and cannula, and the tumour was considerably reduced in size, but in less than six weeks the tumour had attained a larger size than before, the circumference of the neck being 17¾ in. Under ether, a vertical incision 2½ in. in length was made through the skin over the most prominent part of the tumour and at once the surface of it came into view. "Up to this point very little hæmorrhage had occurred. Without much difficulty the tumour was now shelled out, but the hæmorrhage which commenced with this process and continued throughout was very profuse. Firm pressure was maintained by an assistant, the surface was mopped with very hot water mixed with tincture of iodine (1 in 20), and as bit by bit the surface was exposed all the bleeding points were ligatured. The edges were then brought together and a drainage tube inserted. The tumour, which was irregularly ovoid in shape, measured 13 in. by 9 in. and weighed twenty ounces. On being cut into nine ounces of dark sanguineous fluid escaped similar to what had been removed by tapping, but darker." The patient left the infirmary twelve days after the operation.

Although the operation was most skilfully performed, and the result of the treatment as far as reported quite successful, still I consider from the account given of the case that there was nothing to justify the measures which were adopted. The case was apparently an ordinary one of cystic goitre, and it is distinctly stated that neither breathing nor swallowing was seriously interfered with. That the cyst would refill after being tapped might have been foretold, it being the exception when this does not occur; also that it would be liable to attain a greater size might have been stated with equal confidence. These usual results, however, having followed the tapping, Dr. Vachell appears to have thought that no course was open to him but to excise the portion of the gland containing the cyst. Although in the case just recorded the operation was successful, its performance is always attended with considerable amount of risk to the patient. More than one death has resulted from hæmorrhage, which, as it was in this case, is frequently very profuse, and the evil affects which may arise from excision of large portions of the thyroid gland are too well known to need comment. After the grave consequences which are liable to attend the operation, the mere question of the size of the scar which results sinks into insignificance, although I hold that in the surgical treatment of exposed portions of the body this point ought to be considered.

In THE LANCET of Jan. 22nd, 1887, p. 174, is the report of a paper which Mr. Mayo Robson of Leeds, read before the Clinical Society, in which he advocated the treatment of thyroid cysts by antiseptic incision, stitching the edge of the cyst to the skin and scraping the interior of the cyst sufficiently to separate all colloid material, then draining for a short time under an antiseptic dressing, and afterwards packing with zinc lotion and lint. Mr. Mayo Robson thought that the advantages of this method were its simplicity, safety, and certainty. He stated that he would not again practise complete excision, having had one case in which asphyxia and another in which hæmorrhage caused great anxiety. The advantage claimed by Mr. Mayo Robson of stitching the cyst wall to the skin was that by this means the cyst was shut off from the surrounding cellular tissue, and consequently the extension of inflammatory processes was prevented.

The elaboration of the treatment by incision just referred to presents no novel feature, as the following extract from Gross's "System of Surgery" (1882, vol. ii., p. 356) clearly shows: "Incision of the sac and uniting its walls with those of the skin, an operation which I believe originated with von Bruns, has been performed eleven times by Billroth, with three deaths." The fact that three deaths occurred in the eleven cases operated upon by Billroth does not offer much encouragement for the adoption of this method of treatment, especially if he did not scrape the interior of the sac, which proceeding must add considerably to the risks of it. As I consider that the whole operation recommended by Mr. Mayo Robson is open to serious objection, I need not dwell upon this refinement of it, further than to remark that the advantages claimed by the plan proposed are open to question, and to endorse the statement made by Mr. H. H. Clutton, that a sinus is liable to result from the course advocated. The object of the treatment advised by Mr. Mayo Robson is the same as that of Sir Morell Mackenzie—viz., destruction of the secreting surface of the cyst and subsequent union of its walls; but the means taken to produce this result compare most unfavourably with those instituted by Sir Morell Mackenzie.

Before the secreting surface can be destroyed it must be reached. Mr. Mayo Robson effects this by an incision, Sir M. Mackenzie by a puncture. The former method is always attended with hæmorrhage, which in many cases is very profuse; the latter is bloodless, because the pressure produced by the cannula plugs any vessel that may have been wounded, except in those rare cases in which a large vessel in the interior of the cyst becomes injured, and in these no serious result need be feared, because but little, if any, escape of blood can take place externally by the side of the cannula, and the amount of flow internally is limited by the size of the cyst, even if pressure and ice-bags have failed to check it previously. In order to destroy the secreting surface, Mr. Mayo Robson advocates scraping the wall of the cyst sufficiently to separate all colloid material, and subsequently packing the cyst with zinc lotion and lint. Sir M. Mackenzie recommends a solution of perchloride of iron to be injected into the cavity, with the twofold object of checking the hæmorrhage from the cyst walls which follows the withdrawal of the fluid contents, and subsequently of producing sufficient inflammation to destroy the secreting surface. Bearing in mind the extreme vascularity of the cyst wall and the delicate structure of the vessels, I consider Mr. Robson's method of destroying the secreting surface to be highly objectionable, even if not positively dangerous. The steps of the operation recommended by Mr. Robson cannot be performed without producing hæmorrhage, which is always liable to be profuse; the object of Sir M. Mackenzie's treatment, on the contrary, is throughout to prevent hæmorrhage. Holding the views above stated with regard to the method of treatment advocated by Mr. Mayo Robson, I am unable to consider it either simple, safe, or certain.

Having been accustomed myself to treat cases of cystic goitre by Sir M. Mackenzie's method and to see the same course adopted by others, I was unaware of the methods of dealing with this disease advocated in the last editions of the leading works on surgery, having had no occasion to refer to them on this subject, being well satisfied with the plan I employed, and knowing how disastrous many of the older modes of treatment had proved. It was not until my attention was called to the matter by the case referred to, published by Dr. Vachell last year, that I looked at the most recent English and American works on surgery to see what treatment they recommended. Had I done so, being ignorant of the best course to pursue, I confess that when I had finished such study I should have been a sadder but not a wiser man, because no assistance would have been obtained, although the five leading works had been consulted. I should have found that no two authors agreed upon what is the best method to adopt, and that, in fact, all recommended a different proceeding. My efforts to obtain advice would have shown me that Messrs. Holmes and Hulke advocated Sir Morell's Mackenzie's method; that Mr. Bryant recommended puncture as the first means to be adopted; that Mr. Erichsen advised the fluid contents to be drawn off by tapping, and an endeavour made to

cause the cyst to close by inducing inflammation by means of an injection of iodine; that Professor Gross stated that six methods of treatment were at the command of the surgeon, all more or less serviceable, but not one entirely free from danger; and that Professor Agnew apparently did not consider the subject of sufficient importance to necessitate a separate paragraph being given to it, he having enumerated the various methods of treatment applicable to the several forms of goitre in one list, and in such a manner that only a person possessing a full and accurate knowledge of the subject could distinguish which method was suitable to a particular form of the disease. A closer examination of the treatment recommended would have shown me that in two of the three English works injection of tincture of iodine was favourably spoken of, but under different conditions, Mr. Erichsen having advised the cyst to be emptied before the iodine was injected, whereas Mr. Bryant advocated the injection of tincture of iodine and alcohol in equal parts, without any allusion to the preliminary measures recommended by Mr. Erichsen; and that Professor Gross, on the other hand, whilst stating that injections of iodine occasionally succeed, went on to say that the operation was liable to be followed by severe inflammation, eventuating in rapid reaccumulation and was in the main less certain than the use of a seton, whereas Mr. Bryant stated that this latter method was dangerous, and should only be adopted when simple means were unavailing and further interference necessary. With such diversity of opinion it would have been extremely difficult for me to come to a conclusion as to what was the best course to adopt, especially as the weight of opinion was against the treatment which seemed most rational, and I consider that had I selected an operation which necessitated the exposure of my patient to considerable risk, the responsibility for the course adopted would have rested on the shoulders of most of the authors of the surgical works which deal with this disease, rather than on my own.

Considering the frequency with which cases of cystic goitre are met with, and the large number of deaths which have followed the attempts to effect a cure, I maintain that the treatment of this disease demands more serious attention than surgeons have hitherto accorded it.

LAPAROTOMY FOR TUBERCULAR PERITONITIS.

TWO CASES OF LAPAROTOMY FOR ASCITES CAUSED BY TUBERCULAR PERITONITIS; BOTH CURED.

BY JOHN HOMANS, M.D.,

SURGEON TO THE MASSACHUSETTS GENERAL HOSPITAL, AND HARVARD UNIVERSITY LECTURER ON THE DIAGNOSIS AND TREATMENT OF OVARIAN TUMOURS.

IN THE LANCET for Nov. 5th, 1887, is an excellent report of a very interesting discussion at the Clinical Society of London. Mr. Lawford Knaggs does me the honour to refer to a case of mine in connexion with one of Sir Spencer Wells's, albeit I figure as Dr. "Hornan." In tracing the subsequent history of my patients after they have left my hands I have found another case, and both seem to me worth publishing.

In June, 1884, Dr. Tower of South Weymouth, sent me a pale, thin, emaciated girl, twenty-one years old, with a large abdomen full of fluid. Her weight was 90 lb. There was no swelling of the feet. The catamenia had been absent four months, and the girl seemed near her end from general failure of her constitution. I opened the abdomen on June 19th, 1884, and removed about 12 lb. of ascitic fluid. The stomach, apparently distended by fluid, I found as a large tumour in the upper portion of the abdomen; it was about ten inches in diameter. Owing to lymph and adhesions the spleen and liver could not be felt. Much lymph covered the peritoneum in flakes and layers, and lay upon the abdominal viscera. The peritoneum was studded over with little white deposits of tubercles, and nodules were also seen. A piece of the peritoneum was cut out and sent to a pathologist, who reported that the deposits were tubercles, but that the bacillus had not been found. In short, the disease was what we have always called tubercular peritonitis. The abdomen was sponged out as thoroughly as could be done without disturbing the viscera more than was thought prudent, and the wound was closed without the insertion of a drainage tube. And here let me say that I have never been able to establish an artificial drain in a case of ascites by the insertion of a drainage tube. I have tried to do this again and again, but have never succeeded. When Nature means to cure the patient by drainage she reopens the wound. The sutures were removed on the eighth day, and the wound was found united. In about ten days more the abdomen had become distended with fluid, and on July 7th the scar opened and the fluid ran out, and continued to do so. On July 12th the patient went home in good spirits. The ascitic fluid continued to run out, but was not offensive, and I suppose not septic. In November, 1884, she had gained considerable flesh, and had a good appetite. In February, 1885, the catamenia, which had been absent a year, reappeared, and the ascitic discharge was much diminished. In May the amount of discharge was very slight and she was able to walk out of doors; she was married in June. I saw her in January, 1886; she was fat and strong and was doing her housework; her weight was 121 lb. I received a visit from my patient again in November, 1886; she then weighed 130 lb. and was quite strong. She had never been pregnant. There was a slight sinus, which discharged about a drachm of pus a day. The case seemed to me at the time, and seems to me now, a wonderful recovery.[1]

The second case is one in which the patient was not emaciated, and in which I had expected to find an ovarian or parovarian cyst. The patient was a school-girl, seventeen years old, of healthy appearance. Her complexion was pale. Her umbilical girth was thirty-four inches, and I thought I felt a very faint aortic impulse. The catamenia were normal. She was sent to me in April, 1887, by Dr. Kingsbury, of Lyme, New Hampshire. The abdomen had begun to enlarge twelve months before, and the process of enlargement had been slow. On opening the peritoneum on April 20th, 1887, ascitic fluid ran out, and on further investigation the whole abdominal cavity was found to be studded with small hard whitish nodules. They were on the uterus, intestines, and parietal surface of the peritoneum, both ovaries, and Fallopian tubes. One tube thickly studded with tubercles, with its corresponding ovary, was removed. The peritoneal cavity was carefully sponged out, but the ascitic fluid seemed to reaccumulate so fast that a glass drainage tube was put in and the abdomen closed. The specimens were sent to Professor Fitz, who reported that the deposits were tubercular. Only about an ounce of fluid in twenty-four hours was obtained from the drainage tube, and on the third day it was removed. The patient went home at the end of three weeks. On December 28th, 1887, eight months after the operation, I had a letter from Dr. Kingsbury, in which he says that the abdomen is no larger than natural; that she has no fever, pain, tenderness, or unpleasant sensations in the abdomen; and that her appetite is good. She is not very strong, but can endure more than before the operation; she does some light work in the family and gives lessons in music.

The second case is not as remarkable as the first, but perhaps both will aid in the study of the treatment of tubercular peritonitis by laparotomy.

NOTE ON THREE CASES OF OBLITERATIVE ARTERITIS.

BY W. B. HADDEN, M.D. LOND., M.R.C.P.,

ASSISTANT PHYSICIAN AND DEMONSTRATOR OF MORBID ANATOMY TO ST. THOMAS'S HOSPITAL, ASSISTANT PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN.

THE disease known as "obliterative arteritis" is by no means common, and its pathological nature is still uncertain. The case which I am about to describe is unfortunately incomplete. I only saw the patient once, but I satisfied myself that the affection was identical with that described by Mr. Pearce Gould and by myself in vol. xvii. of the Clinical Society's Transactions.

The patient was a fairly robust young man, aged nineteen, a rag-sorter by trade. He came to me as an out-patient at St. Thomas's Hospital on December 10th, 1887, complaining

[1] This case may be found briefly reported in a little book entitled, "Three hundred and eighty-four Laparotomies for various Diseases," by John Homans, Boston, 1887.

of pain, coldness, and loss of power in the right hand and forearm. He said that the affection came on gradually about three months previously, and that the tips of the fingers were first attacked and then the hand and forearm. There was no history of injury or of prolonged pressure affecting the right upper extremity. He denied having had syphilis, and I could not obtain any history of cutaneous eruptions, sore-throat, or other syphilitic manifestations. The patient also assured me that before the onset of his present illness he had never suffered from any serious disease. On examination I found all the fingers of the right hand of a dull-white colour and extremely cold, but there was no sign of gangrene. The right radial artery was hard and tender, and no pulsation could be detected. The absence of pulsation and tenderness extended upwards into the brachial to about the middle of the arm. The ulnar artery, too, was carefully examined, but not the slightest pulsation was detected. The right subclavian artery above the clavicle was remarkably prominent, and pulsated vigorously. A thrill was detected on palpation. The heart was not hypertrophied. No bruit was audible, but the second sound at the right base was much accentuated. The vessels of the left upper extremity were natural.

It may prove of service if I give a brief general account of the two cases observed by myself and of that recorded by Mr. Pearce Gould. Two of the patients were males, and both were nineteen years old; one was a female, aged thirty-five. There was no history of syphilis in any of the cases. No cause could be assigned for the affection, except in the case of the woman, in whom pressure on the vessels during sleep was possibly the exciting agent. In all the cases the right upper extremity was the part affected, and the vascular obstruction was observed to spread from below upwards in two of the cases, and from the patient's statement this was probably so in the other. The arterial vessels affected were hard, tender, and pulseless. The subclavian artery in two of the cases formed a tense pulsating swelling, resembling an aneurysm. In none of the patients was there any reason to suspect cardiac valvular disease; but in one some hypertrophy of the heart gradually ensued. The disease in two of the cases extended over several months, was accompanied by severe local pain, and had a tendency to spontaneous arrest. In the same two patients the tips of some of the fingers became gangrenous, and it may be mentioned that the affected vessels remained apparently impervious after the disease had become quiescent. There is little to add to the account which I have just given. I may say, however, that the etiology of this rare affection is still unknown, and that its pathology calls for further research.

The three cases which I have discussed have so many clinical features in common that I cannot help thinking that they form a distinct morbid class, since they differ in many important points from the few instances of vascular obstruction recorded under the name of "arteritis obliterans."

ON THE

SPECIFIC TREATMENT OF ANTHRAX AND ANTHRACÆMIA, AND OF CARBUNCLE.

BY EDWIN B. MUSKETT, M.D.

Anthrax.

ANTHRAX in man seems to have been somewhat frequent of late in England, and, notwithstanding all that has been done in recent years to elucidate its pathology, its medical treatment does not seem to have advanced; excision and the stronger caustics constitute, as they did a century ago, the chief resources, whilst for the constitutional symptoms there appears to be absolutely no remedy at all. There is one thing, however, which is frequently mentioned in the record of fatal cases, the application of a warm poultice to the sore, than which there can be no more dangerous proceeding; even if experience did not show this to be the case, a consideration of the pathology of the disease would indicate the probability that the use of warm nutritive moisture would promote in a high degree the growth of the bacillus anthracis. Perhaps the experience gained during several years' practice in a country where splenic fever is common amongst cattle, and infection from these of human beings by no means infrequent, and where some of the cases mentioned in English medical journals have really had their origin, may not be without interest. Anthrax, indeed, has an interest of its own as the very type of those diseases of the blood and tissues which owe their existence to the presence of microscopic parasitic fungi.

The remedy I have been in the habit of using in such cases is ipecacuanha, applied externally, mixed with water to the consistence of cream, and administered internally at the same time; this treatment has sometimes been preceded by the application of a small blister. I have treated about fifty cases of this disease in this manner, extending over a period of fifteen years, and hitherto it has never failed; the effect has been so immediate, so constant, and has extended over so long a period of time, that it will not be likely to often fail in the future. "Always does not happen in medicine," and therefore it is possible that failures may sometimes occur, though I believe they need happen very seldom. The cases which I have selected below prove, I think, as far as they go, that ipecacuanha is a specific for the disease, in the sense in which quinine is a specific for ague and mercury for syphilis. The first case, treated within the last few weeks, is interesting, because anthrax with a depressed centre is a particularly fatal form of the disease, the depression showing that the disease has ceased to spread in the skin, but is spreading in the subcutaneous tissues.

CASE 1.—A. W——, about forty years of age, a farmer and transport rider, but who had been for some time resident in town, had been previously in good health. During the night of May 26th he noticed a pricking and itching on the back of his forearm, and in the morning discovered a pimple with a blackish vesicle at its summit, and surrounded by a hard swelling at the same spot; this increased rapidly, and he was first seen on the evening of the 28th. On the back of his forearm a little above the wrist was a tumour about an inch and a half in diameter; in the centre of this was a depressed sore, having at the bottom a black slough. The forearm was red and swollen up to the elbow; the glands in the axilla were swollen. The sore was somewhat painful, the pain shooting up the arm and across the chest, and he felt chilly and wretchedly ill. Ipecacuanha was applied to the swelling, and he was ordered to take five grains of ipecacuanha with one-eighth of a grain of morphia every four hours.—May 29th: The tumour measures an inch across, and is very slightly raised above the skin. The surrounding swelling has disappeared, as has the black slough; the sore is discharging a little. The pain has left him; the axillary glands are still a little swollen. He feels well, and has a fair appetite.—30th: Feels well; swelling reduced to about half an inch, and the ulcer is much swollen; axillary glands no longer swollen. The internal use of the drug discontinued.—31st: Swelling and sore about the same size; the loosened slough is projecting from the opening. The wound was dressed with resin ointment, and healed like an ordinary ulcer. About three weeks before the pimple appeared he visited the farm of his brother-in-law, where sheep were dying of splenic fever (about 100 died). He went to the sheep kraals, but does not remember that he touched the sheep.

CASE 2.—D. N——, a transport rider, forty-two years old, a strong healthy man; charbon seven days. He noticed a blackish pimple on the back of his hand, which itched violently and increased rapidly, making him feel ill, but he managed to get about for the first six days. On the seventh he was too ill to get about any longer, feeling chilly, with pains throughout his body, and a tendency to faintness. Towards evening the pains left him, and he went to bed. At 10 o'clock his symptoms became alarming, and I saw him for the first time. I found him propped up in bed unable to lie down without a feeling of suffocation, or to sit straight up without fainting. Pulse rapid, weak, and irregular. On the back of his hand was a sore more than an inch in diameter, from which protruded a blackish purple mass, partially covered by a white translucent membrane. Surrounding the sore was a hard swelling extending for about two inches. The arm was red and swollen to above the elbow, with numerous blackish vesicles on the wrist. Ipecacuanha having been applied to the sore, he was directed to take five grains with a little morphia every four hours. An hour after the first dose he vomited slightly, and then was so far relieved as to be able to lie down and sleep in a

disturbed manner until morning.—Eighth day (morning): He feels somewhat dizzy and very weak, but otherwise well, and wishes to get up. On uncovering the sore, it was found to have shrunk to half an inch, and the black centre had shrunk into a greyish slough. The surrounding swelling and redness were gone, as well as the redness and swelling of the arm. The blackish vesicles were dried up; the glands in the axilla still somewhat swollen.—Evening: Glands no longer swollen; state otherwise much as in the morning. Refuses to take the medicine any more, as it makes him vomit.—Ninth day: Feels weak, but otherwise well, and is allowed to get up. Wound dressed with resin ointment, after which it healed without anything to remark. But for prompt treatment this case would almost certainly have proved fatal within a few hours. The source of infection could not be traced.

CASE 3.—A. Z——, a farmer, assisted to skin an ox, which had died of splenic fever. Shortly afterwards he felt an itching spot, which developed into a pimple with a black vesicle, increasing in size and forming a charbon. He was first seen on the evening of the eighth day of the disease. He had a sore about the size of half-a-crown on the palm of his hand, near the thumb, with a blackish slough; the arm was red and swollen to above the elbow, with numerous blackish vesicles round the sore and in front of the forearm; the axillary glands were swollen; the hand and arm were very painful, with deep-seated suppuration beneath the palm. He could not stand up without feeling pain, and felt chilly and wretchedly ill. Ipecacuanha was applied to the sore and five grains given internally every four hours.—Ninth day: Feels no longer ill, but weak, and the swelling in the arm is much less; the vesicles have disappeared. An incision was made in the palm, giving exit to pus and sloughs. From this time he recovered, with two of his fingers stiff and contracted.

CASE 4.—Mrs. V. D. M——, about thirty years of age, noticed a pimple which itched violently on the back of her little finger. On the same day she had an accident, being thrown from a cart, cutting her eyebrow and scratching her face severely. On the third day her finger became very painful, the pain extending up her arm and striking across her chest to her heart, and the glands in the axilla were swollen. The sore presented the appearance of a blackish vesicle, with a small black slough in the centre. The vesicle was cut off and ipecacuanha mixed with glycerine applied, three grains being given internally every four hours. This was at 9 o'clock in the morning, and in half an hour the pain subsided and remained absent until 2 o'clock the following morning, when it began to return in the finger but not elsewhere. At 9 o'clock the vesicle had again returned. The treatment was then repeated with the same result—relief of the pain and its return on the following day. A small blister was then applied, and afterwards the ipecacuanha. This effectually arrested the disease, which did not return, and the sore was healed up in the ordinary way. This is the only case in which there has been a partial failure due, as I have since learned, to the use of glycerine instead of water, owing probably to the strong exosmotic action of the former substance.

I have not thought it necesaary to describe the other cases, as they present nothing which is not included in those already mentioned, differing from each other only in their position and severity, and pursuing the same course under treatment. These cases speak for themselves, and I do not think there is any other method of treatment which will produce such results, though there are some native drugs which have a somewhat similar effect, but in an inferior degree.

Though charbon is almost entirely confined to persons who have to do with cattle, it is not always easy to trace the direct source of infection. It may be caused by flies, or by the skins and wool of cattle not themselves diseased, or, perhaps, by the germs existing on the herbage. It has been too generally concluded that the Bacillus anthracis is a parasite whose natural habitat is the animal tissues, and is only accidentally present on vegetation, instead of, as I believe, the exact reverse—that it is naturally present on the vegetation and only accidentally present in the animal body, which is probably also the case with such diseases as diphtheria and typhoid fever. Nowhere is splenic fever so prevalent or so fatal as in a newly settled country where no cattle have grazed before—a fact which many colonial farmers have learned to their cost. By successive or continuous occupation such pasturage becomes healthy.

Carbuncle.

Carbuncle resembles charbon in many respects, and it occurred to me that the same treatment might be useful. Being a comparatively rare disease in this part of the world, I had to wait some years before getting a chance of testing it, but at last three cases came in succession, followed by a fourth after a long interval. Four cases may seem a small number to justify my designation of specific, but the results correspond so exactly with those obtained with charbon, that I think I may be justified in using it.

CASE 1.—E. B. C——, a farmer, a strong healthy man, about thirty-five years old, was brought into town with a large carbuncle on his back. He felt so ill that he fancied he was suffering from the more serious disease.—April 3rd, 1882: The carbuncle was about five inches in diameter, and was still increasing rapidly; it was situated over the lower angle of the scapula, was extremely painful, and had existed for four days. Ipecacuanha was applied to the place, and five grains given internally every four hours.—4th: Feels no longer ill; the carbuncle has shrunk to about two inches, and has lost the peculiar appearance of that disease; fluctuation distinct in the middle.—5th: An abscess about the size of a florin is all that remains of the disease; this was opened, and a small quantity of pus and some sloughs escaped. He drove himself home (twenty miles) the same afternoon.

CASE 2.—On May 5th, a rivetter, employed at the Hopetown Bridge, about fifty years of age, came with a carbuncle on the back of his neck, measuring about three inches across. It was very painful, but he did not feel ill. Ipecacuanha was applied, but not given internally.—May 6th: The tumour measures an inch and a half, and is no longer painful.—7th: Nothing remains but a small abscess. An opening having formed at the apex, it was not cut, and the contents were all removed through this hole, which healed in a few days.

CASE 3.—On June 1st another man from the same place came with a similar carbuncle, also on his neck. The course of this case was precisely like that of the previous one.

CASE 4.—On May 18th, 1886, B. B——, farmer, a strong, healthy man, forty-five years old, was brought into town suffering from a carbuncle on his left buttock. It was as large as a cheese-plate, and so painful that he had not been able to sleep for more than a week. He did not feel ill, but exhausted from pain and want of sleep. Ipecacuanha was applied to the sore, and five grains with one-eighth of a grain of morphia given internally. The application caused some smarting, which lasted for half an hour; after this he slept till morning.—May 19th: The carbuncle has disappeared, except some redness and a central fluctuating swelling; this being opened, a quantity of blood with some sloughs and a little pus escaped. Resin ointment was applied.—20th: Nothing remains but the small cut; he was able to walk about, and the wound healed in about a week.

Carbuncle has been sometimes described as a large furunculus, or an aggregation of furunculi; it may therefore be of interest to know that ipecacuanha has no beneficial influence upon boils, neither is it of any particular use in erysipelas. The value of the drug in the treatment of some kinds of dysentery is sufficiently well known, and was, in fact, the reason of my experimenting with it in cases of charbon in the absence of any satisfactory remedy for such cases, the two diseases having many points in common.

A CASE OF

RECOVERY FROM SUBACUTE PHTHISIS,

WITH REMARKS ON THE PATHOLOGY OF THE DISEASE.

BY A. G. AULD, M.D.

THE subject of this communication, a young woman aged twenty-three, first came under my observation in the latter part of 1884. Her family history was bad: her father and a brother had succumbed to lung disease; a sister was lying ill of phthisis, of which she shortly died; and she herself was weak, anæmic, and very dyspeptic.

Notwithstanding these hindrances, she managed, with the aid of arsenic and iron, to fulfil her arduous duties as a teacher, with but slight intermissions, until August, 1886, when increasing weakness, anorexia, and scrofulous inflam-

mation of the right cervical glands laid her aside. An examination of the lungs at this time revealed nothing very definite. In due time a large quantity of characteristic pus was twice abstracted from the neck. Shortly afterwards, about Christmas, an intense inflammation attacked the great joint of the thumb of the right hand, leading to sinuses, discharging evidently tubercular pus. After two months this discharge with its attendant phenomena began to disappear, while simultaneously were developed the signs and symptoms of phthisis pulmonalis.

The disease at first threatened a somewhat severe course. The left lung became extensively involved; temperature ranged from 102° to 104°; cough and expectoration considerable; night sweats profuse; circulation very weak; appetite gone. "Those are the gloomiest cases of phthisis," says Dr. Sutton, "where there are anæmia and weakness of the pulse." In the middle of May, Bergeon's treatment, then attracting attention, was contemplated, but the patient was considered too weak, and the idea was abandoned. About this time, however, the stomach, which hitherto had resisted all treatment, began to show signs of improvement, and as much suitable food as could be borne was administered. Occasional attacks of sickness were best relieved by a few drops of solution of cocaine, with ice, and the bowels were kept well open. No antiseptics were employed, as I have been invariably disappointed in their use. This improvement steadily increased, accompanied by a very pronounced amelioration of the general symptoms and a very remarkable gain of flesh, till by the middle of July the pyrexia and night sweats had almost entirely ceased. The expectoration nevertheless continued, and there were the physical signs of a vomica in the left apex, whilst in the right moist râles were audible. Considering the case unusual, I communicated with Professor Hamilton of Aberdeen in the month of August, who kindly examined the sputum, and reported that, after a very careful examination, he found that "it contains the tubercle bacillus in considerable abundance." From this period onward the patient was rapidly recovering, and by the end of September the cough and expectoration had nearly ceased, the moist sounds had almost vanished, and vesicular breathing was partially restored over the damaged areas. Early in October menstruation took place for the first time for several years, the discharge being normal as to duration and amount. By the beginning of November the cough had entirely disappeared, no moist râles were audible, menstruation had reappeared, and hitherto this favourable condition is maintained.

Remarks.—I think it may fairly be asserted that this is a very striking case of cured phthisis, considering that the patient was housed on a damp soil, in comparatively unfavourable surroundings, and recovered without the use of any of the "special" means of cure. To what, then, is this very gratifying and encouraging result to be ascribed? Critically reviewing the facts, first of all it seems to me clear that the morbid processes in the neck, the thumb, and the lungs were manifestations of one and the same disease, caused by a specific poison acting at these different points *seriatim*. From this I infer that the virulence of the poison became successively attenuated relatively to the tissues from a modification in the constitution of their bioplasm—the first two outbursts thus representing, to a certain extent, protective inoculations. This theory harmonises with the view that the exciting cause of phthisis is the micro-organism discovered by Koch, while it is opposed to the view propounded by Niemeyer as to tubercle being secondarily evolved from the products of non-specific inflammation. Again, the experiments of Watson Cheyne go to show that the *modus operandi* of the bacilli in contact with the tissues consists in the production of a chemical poison, and it may be surmised that it is the incorporation, more or less, of this product with the circulating blood, which imparts to the tissues the alteration in their molecular disposition to the disease. On the other hand, it is no doubt true that the lesions of phthisis are various; but individual peculiarities seem in great measure sufficient to account for this, as witness the occurrence of "tubercular" phthisis in one member of a family and "fibroid" phthisis in another. In like manner with "caseous pneumonia"—the product of the specific virus undergoing a transmutation directly relational to the resisting power of the organism. Further, it appears indisputable that without an antecedent morbid blood change the bacillus is inert, notwithstanding the presence of local injury, which leads to the conclusion that there seems nothing in this view of the essential unity of phthisis calculated to cast doubt on the existence of a primary fibroid induration of the lung, described chiefly by Sir Andrew Clark, but which cannot truly be styled "phthisis."

HERPES ZOSTER.

BY W. OWEN TRAVIS, M.B., M.S. DUB., M.R.C.S.,
LATE DEMONSTRATOR OF ANATOMY, YORKSHIRE COLLEGE, LEEDS.

V. BÄRENSPRUNG, in his excellent paper on Herpes, with considerable ability extends the nomenclature of the various forms of zoster in accordance with the regional distribution of the lesion. Amongst the varieties described by him are the *zoster cervico-subclavicularis*, corresponding to the distribution of the superficial descending branches of the cervical plexus; the *zoster cervico-brachialis*, to the distribution of the brachial plexus; and the *zoster dorso-pectoralis*, to the distribution of from the third to the seventh dorsal nerves, inclusive—no notice therefore being taken of the second dorsal nerve in its entirety, or of the first, excepting that portion of it which enters the brachial plexus, and then only as part of the general affection, zoster cervico-brachialis. The omission is the *raison d'être* of this communication.

A few days ago I had the opportunity of seeing, with Dr. Atkinson, the following case of zoster. The patient, a man aged twenty-four years, had an eruption, arranged in groups, having all the characters of and being herpes, and having the following distribution. Commencing in the right axilla, it extended forwards over the third rib and adjoining portions of the second and third intercostal spaces, though encroaching more upon the latter space, to the margin of the sternum downwards; along the inner side and back part of the arm, to within two inches from the prominence of the inner condyle of the humerus; and outwards, around the back of the upper part of the arm to just beyond the posterior margin of the deltoid in its lower half, the corresponding part of the thoracic region posteriorly being entirely free. The groups were arranged as follows: one rather large group in the axilla, three along the third rib, four down the inner side of the arm, and two over the deltoid and between it and the axilla. The nervous supply of the affected areas were: the axillar and costal area, the second and third intercostal nerves, the latter mainly; the humeral area, the intercosto-humeral nerve—i.e., the lateral cutaneous branch of the second intercostal nerve, which is occasionally strengthened, in rare instances replaced, by the posterior division of the lateral cutaneous branch of the third, in addition to very exceptionally receiving a small lateral cutaneous offset of the first; and the deltoid area—the cutaneous branch of the circumflex nerve. Inasmuch as this latter nerve is a branch of the posterior cord of the brachial plexus, which is formed by the posterior divisions of the three trunks into which the nerves entering the plexus are grouped, and as the lowest of these is formed partly by the first dorsal nerve, there will be in the circumflex nerve filaments of the first dorsal nerve. With regard to this assertion, I am aware that Quain, in his table referring the nerves resulting from the brachial plexus to their origin, does not mention this, but certainly does not refute it; and, though an ardent admirer—as, I think, everybody must be—of his anatomy, yet in this particular I believe it to be a little imperfect, as, in addition to and connexion with the above, no mention is made of the communicating branch of the fourth cervical nerve. If this be granted, then I do not see that it is necessary to exert any excessive imagery in assuming the lesion I have described to be one of herpes zoster affecting the first, second, and third dorsal nerves. The fact that the superficial descending branches of the cervical plexus supply the subclavicular region will account for that region being unaffected, even though one disregards the fact that the first dorsal nerve has no lateral cutaneous offset, except in very rare instances, and that the lateral cutaneous branch of the second has commonly no anterior division. The non-implication of the other branches of the brachial plexus into which the first dorsal nerve enters, and also of that portion of the back supplied by the first three dorsal nerves, is only another instance of the way in which in many cases of zoster

certain areas are picked out to the exclusion of certain other areas supplied by the same nerve.

On looking over the records of zoster, I find that Bryant describes a case nearly resembling, though more extensive than, the above, and that amongst Hutchinson's sixty-three recorded cases are lesions involving the first and second, the second, the second and third, and the third dorsal nerves, but not the one above described. In extending v. Bärensprung's nomenclature, I would suggest that to the above and similar cases the term "zoster pectoro-brachialis" be applied.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

SPINA BIFIDA AND HYDROCEPHALUS COMPLICATING PARTURITION.

BY W. M. BEAUMONT, M.R.C.S., L.S.A.

MRS. P——, aged about thirty-five, a strong healthy woman, had been married four years when she became pregnant for the third time. There was nothing abnormal in the first or second confinement. On Dec. 1st she sent for me at 11 A.M., saying she had been ill all night. On my arrival the os was fully dilated and the membranes intact The breech was presenting and was quickly born, disclosing a spina bifida in the lumbar region, two or three of the spinal arches being absent. With very considerable difficulty the arms were brought down, and with some manœuvring and a good deal of traction (the pelvis fortunately being roomy) the head was delivered. The cause of the obstruction was a hydrocephalus of moderate dimensions—a condition which I had been unable to diagnose before birth. The child was a living female of average development otherwise, and survived its birth thirty-eight hours. There was a very large quantity of hair on the scalp, but none in the lumbar region. The occipito-frontal circumference measured fifteen inches and a half, but fortunately the parietal bones were very loose, and adapted themselves to the exigencies of parturition. The mother made an uninterrupted recovery.

In reviewing this case, I cannot help thinking that the spina bifida ought to have been sufficient clue to the nature of the obstruction. But hydrocephalus is seldom diagnosed before birth, even in head presentations. When the breech presents (and it is said to occur once in every five of these cases) the difficulties must be manifestly increased. Hydrocephalus is a rare complication of labour, and Playfair says it is one of great gravity to both mother and child. Dr. Keiller of Edinburgh, in seventy-four cases, found that rupture of the uterus occurred sixteen times. The usual treatment of tapping the head was not necessary in my case; but, had some operative measure been required, the question arises, Might the fluid have been evacuated by opening the spina bifida? Tarnier in a case of hydrocephalus, with breech presenting, opened the vertebral column and passed in an elastic catheter, thus drawing off the intra-cranial fluid. The fact that it was necessary to pass in a catheter before the fluid could be evacuated seems to indicate that it would have been useless in my case to open the spinal cavity in the lumbar region, for there was no tenseness or bulging of the spina bifida. In a case of hydrocephalus complicated with spina bifida in the practice of Dr. McClintock, he found that the fluid in the head did not communicate with that in the vertebral sheath. With regard to the cause of this arrest of development I can say nothing. There was the usual history of a fright a month before delivery—that is, one would suppose, long after the arrest of development began. Patients find it so easy to explain everything. Perhaps that which is more to the point is the family history. One of the patient's sisters died insane in an asylum; another is the subject of hip disease; a brother, after breaking his ankle, suffered from disease of the joint, for which the foot had to be amputated. Of her two previous children, Mrs. P—— lost one in convulsions, and the other also is subject to them. On the husband's side the family history is good.

CASE OF IMPERFORATE ANUS.

BY J. W. SMYTH, L.R.C.P., L.R.C.S. ED.

THE following case appears to me of sufficient interest to warrant publication.

Mrs. J—— was delivered by me of a male child on Nov. 20th and on inquiry the following morning I found that it had not passed any motion by rectum, but that there were distinct traces of fæcal matter having been passed with the urine. On making an examination I found that I had to deal with a complicated case of imperforate anus and connexion of the rectum with the bladder, and advised the child's removal to the hospital; but the parents not assenting to this, I operated myself. The mode of operation was as follows. I first pinched the child and made it scream, in order to find out if there were any bulging or appearance of bowel; but not finding any, I made a cut in the median line towards the coccyx, three-quarters of an inch in length and a quarter of an inch in depth. I then passed my index-finger into the opening, using it as a director for my scalpel, and cut upwards in the direction in which I expected to find the bowel. Having worked my finger carefully upwards for about three inches without finding it, I passed a small catheter into the bladder per urethra until I found the point touch my finger. By carefully moving it about I was able to pass it through the bladder into the bowel, and with gentle pressure brought it down into contact with my finger. While my assistant held the catheter in its place, I cut down upon the point, upon which my little patient had a free evacuation from the bowels. Every day for a week I passed a large bougie, after which time, finding everything satisfactory, I discontinued it, and the child has been progressing as well as could be desired, having a free evacuation once or twice a day; and now, just two weeks after the operation, all discharge of fæcal matter with the urine has ceased. I consider that the early operation (just twenty-four hours after birth) accounts for the successful termination.

CASE OF PLACENTA PRÆVIA.

BY C. R. OWEN, L.R.C.P. ED., M.R.C.S.

I WAS called in to see Mrs. C——, multipara, aged thirty, on Nov. 28th. She was about eight months pregnant, and had had a sudden discharge of blood, unaccompanied by pain. On examination I found that the os was thick and soft, and would admit of one finger. I could feel the placenta on the right side of the cervical zone of the uterus, and on pushing my finger a little beyond this could feel the head of the child. The hæmorrhage had been very slight, and had ceased. I prescribed, and ordered her to keep in bed, leaving instructions that I was to be called again if there was any return of the bleeding. I was sent for the next day, there having been a sudden renewal of the discharge, and in greater quantity. On examination I found the same condition of things as at first, with the exception that there was more hæmorrhage, with some clots. The os was dilated to about the size of a five-shilling piece, and slightly dilatable. I inserted my left hand into the vagina, and the index finger into the uterus; the placenta and cord were easily felt, and beyond this the child's head and hand. The liquor amnii was intact. I gave the head a little tilt with my finger, and, as there were no pains, it easily bobbed up; and the arm was next treated in like manner. Then I could feel the foot through the membrane; this I seized, at the same time breaking the sac, drew the foot down, and delivered. The child was born alive in about half an hour from my arrival, and with firm pressure on the uterus the placenta soon followed.

This is an ordinary case of placenta prævia, and I have had several like it; only in cases where the os has not been dilatable have I found them to be at all tedious; this can be overcome by using Barnes's bags, at the same time avoiding the danger of hæmorrhage. I fail to see the combination of complications your correspondent refers to in his case published in your issue of Nov. 26th, which seems similar to the foregoing, with the exception of the adherent placenta, which occurs to every practitioner, and is dealt with in the usual way.

CASE OF DISLOCATION OF THE THUMB FORWARDS.

BY FRANCIS TAYLOR SIMSON, L.R.C.P. LOND., &c.

H. P——, aged nine years, was brought to me on Jan. 27th. He stated that he had been thrown down by a boy in the school playground, falling on his right hand. On examination I found a deep depression on the dorsal aspect of the thumb at the metacarpo-phalangeal joint, the first phalanx of the thumb being dislocated and displaced, so that the base of that bone reached nearly to the centre of the palm. Failing to reduce it, I put him fully under chloroform, and then found the base of the first phalanx apparently held tightly by the two heads of the flexor brevis pollicis, exactly as the head of the metacarpal bone is held in the common backward dislocation. I pressed the phalanx still further into the palm of the hand and tried extension, but the most powerful effort I was capable of failed to produce any result. I then placed the fingers of both my hands on the dorsal aspect of the joint, holding the muscles firmly forwards and towards the centre of the palm, and, applying both my thumbs to the base of the phalanx, I pressed it upwards and towards the radial side, when I was pleasantly surprised to find the bone glide easily into its place. The thumb was then flexed a few times, to disengage any tissues that might have been in the way, and the hand put up in a stiff case for a few days.

The case may be of interest on account of its rare occurrence. Mr. Holmes, in his Treatise on Surgery, dispatches it in three lines, merely saying that four examples are related by Nélaton, one of which remained permanently irreducible.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. THOMAS'S HOSPITAL.

A CASE OF ALCOHOLIC PARALYSIS WITH CONTRACTURE OF THE FLEXOR MUSCLES OF THE LEGS; RECOVERY; REMARKS.

(Under the care of Dr. ORD.)

THE principal points of interest in the following case to which we would draw attention are so clearly indicated in the remarks by Dr. Ord appended to it that we refer our readers to them. For the account of the case we are indebted to Dr. W. W. Ord, house physician.

C. R——, a barmaid, aged twenty-four, was admitted on Sept. 13th, 1886. Her family and personal history was good. She had been quite well up to three months before admission, when she began to have pains about the limbs, and her urine became thick. She was treated for rheumatism. Three weeks before admission she began to be delirious. For eighteen months before admission she had been in the habit of taking port and gin in considerable quantities in the pursuit of her calling.

On admission, the patient appeared to have been losing flesh. She was very wild-looking, and was constantly muttering in an incoherent manner and throwing her arms about. She lay for the most part on the right side, with her arms stretched out in front of her and with her legs curled up. There were occasional movements of the legs, not so marked as those of the arms. All the movements were increased on exertion or excitement. It was seldom possible to understand what she said, as her voice was a thick, incoherent whisper. She gave her name correctly. She could not sit up in bed, and any attempt to move her caused her to shriek out. The spinal column was normal. She was quite quiet during sleep. She passed her evacuations unconsciously. The muscles of the calves were tender and wasted, especially on the left side. Reflexes were not obtained. There was a slight rise of temperature up to 100·4°. The abdominal and thoracic organs were healthy. Pulse 126, feeble; tongue dry and brown; teeth covered with sordes. There was no albuminuria.

On Sept. 26th the patient had a slight rigor, followed by intense dyspnœa and lividity. Respirations 54; no movement of the diaphragm. She was relieved by subcutaneous injection of ether. She began to get more sensible about this time, but was still rather unintelligible on account of thickness of speech. She suffered a great deal from insomnia. She had a similar attack on Sept. 30th. After this seizure she was quite sensible for a short time. Temperature varied between 97·2° in the morning and 100·2° at night. In the beginning of October she began to have delusions, saying that she saw and heard strange things about her. The muscular tenderness had become more marked, and was pretty general. She did not cry out, but frowned and groaned when pinched. She had lost flesh since admission. The urine had a specific gravity of 1020, with a trace of albumen. Chloral and bromide of potassium had no effect on her, and she slept better without them. The deep reflexes were still absent. The right leg was more wasted than the left. The feet were somewhat inverted. The flexor muscles of the legs began to contract. The patient lay with the thigh flexed on the body and the leg on the thigh. Any attempt to straighten the leg caused the most intense pain. On Oct. 11th she was ordered the faradic current daily. About this time she began to complain of loss of power in the arms; and when the arm was lifted the wrist dropped. She also complained of sickness and pain down her back. In the beginning of November the muscular pain began to abate; the muscles of the arms reacted fairly to the faradic current, those of the legs less so. The larynx was normal. She began to use her diaphragm slightly in respiration. There was no albumen detected in the urine at this time, and no sugar. On Nov. 30th the patient's eyes were examined by Mr. Nettleship, who found that there was severe retinitis in both, with white patches and bright white dots. The discs were very little affected. The changes were most marked in the right eye. Mr. Nettleship considered that these signs must point to the presence of either renal disease or diabetes, but the urine was examined repeatedly about this time, and no albumen, no sugar, and no casts were found; there was always an excess of phosphates. On Dec. 17th several fresh flame-shaped hæmorrhages appeared in the left eye, and on the 21st a trace of albumen was detected in the urine, which was of specific gravity 1027 and acid. On the 22nd the following note was made: "Heart dulness begins at the third rib and extends four inches to the left of the sternum; apex beat in the fifth space in the nipple line; second sound accentuated at both bases; some arterial tension." In the beginning of January, 1887, the patient, whose legs had been immovably flexed so that the heels almost touched the buttocks, began to regain slight power of extension. The muscular tenderness diminished, but forcible extension still caused great pain. She began to feed herself a little, but she was unable to write. Her mental condition began to improve. She suffered from no delusions, was cheerful in demeanour, and recognised those about her. Throughout February she continued to improve both physically and mentally; her urine still contained a trace of albumen, but no casts were found. On April 13th the albumen disappeared from the urine, and never returned. The legs were now flexed at about a right angle at the knee joint; forcible movement caused great pain behind the knee; voluntary movement was limited to two or three degrees. The hands had recovered power to a great extent, the left more than the right. The muscular tenderness still remained. On May 13th the constant current was ordered to be applied to the legs for ten minutes daily. In June the hands had so far recovered that she was able to sign her name fairly legibly. The legs were much straighter, had regained power, and to a large extent had lost the pain and muscular tenderness. The calves began to increase in bulk. Examination of the eyes showed two or three dull white patches on the right side, one larger than the rest, around the vessels just above the disc. On the left side were a few very small white patches; no hæmorrhages were seen; the discs were clear in outline. On July 13th further examination revealed a dull white more or less uniform patch just above the right disc; there were numerous pigmented spots in the outer part of the field; in the left eye there was a group of small very bright white spots to the lower and outer side of the disc; and similar spots were scattered about the field. No fresh hæmorrhages; discs normal. On June 16th

the patient got up and hobbled about with assistance, but the movement caused her intense pain. There was still some contracture at the knees. The ankle joints were very loose, and there was a good deal of contraction of the calf muscles, especially on the right side. In August the calves had increased two inches in circumference since April, but the legs could not be straightened. Accordingly, on Sept. 3rd an extension of the weight of 6 lb. was applied to the right leg; and on Sept. 11th an extension of 10 lb. was applied to each leg. Under this the legs began to improve both in position and in size. The urine was repeatedly examined during the summer, but nothing abnormal was found. Muscular tenderness had now entirely disappeared, and only very forcible extension caused pain at the joints. The condition of the eyes remained the same. On Nov. 8th the patient was put under ether, and the legs were forcibly straightened by Mr. Battle. They were afterwards put up in plaster-of-Paris splints. She complained of great pain for the next two days. On Nov. 19th the splints were removed, after which the contracture at the knee began slowly to recur. On Nov. 25th the patient was again put under ether, and the legs straightened and put up in plaster by Mr. Battle. The right tendo Achillis was divided subcutaneously. The splints remained on for a week. On Dec. 10th the knees were again straightened under ether, and the legs placed perfectly straight; the feet were also put up at right angles to the legs. The splints were removed on Dec. 14th. After this the knees remained very straight, but the feet again became rather pointed. Accordingly on Jan. 3rd, 1888, Mr. Battle again put up the feet at right angles to the leg in plaster splints. These remained on for a few days, and on removal the feet were found to be in a satisfactory condition. The patient now began to take regular exercise with assistance, and on Jan. 21st had so far recovered that she was able to walk out of the ward only just leaning on her husband's arm, having been in hospital for sixteen months.

Remarks by Dr. ORD.—It may be remarked that this patient, in addition to well-marked symptoms of alcoholic cerebral disturbance, presented when first seen the signs of alcoholic paraplegia in a most typical form. She had already great loss of muscular power in the extremities, particularly in the legs. The muscles were wasted and relaxed, so that the foot, for instance, when the leg was shaken, shook like the distal blade of a flail. Muscular hyperalgia was strongly present, and the reaction of degeneration was marked. The knee jerk and other deep reflexes were entirely absent. Yet with all these indications of loss of tonicity, contracture was present from the first, the flexors being evidently less relaxed than the extensors, and the muscular hyperalgia preventing any passive restoration of the balance. If there be anything which can be called paradoxical it is such a condition. In relation with the marked evidences of dystrophy of muscles may be noted the condition of the skin. In the earlier days of the patient's stay in hospital, the skin, particularly of the legs, was uniformly pallid, limp, and dry. At a later stage, when, the muscles being found to react under faradaism, that form of electrical stimulation was regularly applied, the skin underwent a remarkable change; it became pink, firm, and slightly moist. The occurrence of a retinitis practically indistinguishable from albuminuric retinitis is a point which has strongly attracted my attention. Every effort was made to discover signs of mischief in the kidneys. The urine certainly presented no signs of acute nephritis. If any renal disease were present, it must have been interstitial nephritis. The albumen discovered at any time was extremely small in quantity; there were no decisive alterations in the quantity or specific gravity of the urine, and no indications of renal disease could be discovered by the microscope. Yet there was very marked arterial tension and distinct enlargement of the left ventricle, associated with the changes in the heart sounds, which are recognised as indicating considerable arterial tension. All these, after lasting some months, passed away. The question arises whether the retinal changes were due to renal mischief, or were possibly due to a peripheral neuritis of alcoholic origin. The surgical treatment adopted by Mr. Battle in the later stages was not only absolutely necessary on account of the extreme contractures, but was also remarkably successful. Faradaism of the extensors, which was steadily applied, had failed to relieve the contracture, and in my opinion nothing but surgical assistance could have completed the cure of the case.

NORTH-EASTERN HOSPITAL FOR CHILDREN.

OBLITERATION (? CONGENITAL) OF THE LEFT INTERNAL JUGULAR VEIN; CHRONIC PLEURISY; DEATH BY ASPHYXIA; NECROPSY.

(Under the care of Dr. W. PASTEUR).

HARRY W——, aged two years and a half, was admitted on Oct. 2nd, 1885. He had measles and scarlet fever during his first year. When twelve months old he had bronchitis and inflammation of the lungs, followed by a persistent difficulty of breathing, which had become worse during the previous six months.

On admission he was a well-developed and well-nourished boy, without signs of rickets. The face was rather bloated and cyanosed, and the extremities were livid, but not swollen. There was very slight clubbing of the finger tips. The breathing was jerky and rather laboured; he had a frequent husky cough, without expectoration. There was no fetor of breath, and the temperature was normal. The movements of the chest in respiration were limited, with well-marked inspiratory recession above the clavicles, and to a smaller extent in the lower intercostal spaces. The percussion note was slightly impaired all over the left chest, and on auscultation over this region there were numerous fine bubbling râles and moist crepitations, with a very metallic ring at the angle of the scapula. The breath sounds over the right chest were loud and harsh, but free from râle. The cardiac dulness was slightly increased laterally in both directions. The apex beat was situated an inch and a half below the nipple and just outside the nipple line, the impulse being strong and heaving. The heart sounds were loud and sharp, with reduplication of the second sound. The liver was uniformly enlarged and slightly tender. There was no evidence of ascites. The urine was normal.

He was discharged greatly relieved at the end of seven weeks. A fortnight later (Dec. 4th) he was readmitted, presenting all his former symptoms in an aggravated form. The face was deeply cyanosed and bloated almost beyond recognition. The external jugular veins, however, were not abnormally distended, and did not pulsate, but the left facial vein was noticed to be unduly large and full. There was also some fulness of the superficial veins just below the left clavicle. The heart was labouring strongly, with loud sharp sounds, and there was intense dyspnœa.

The child was at once placed in a tented cot with a bronchitis kettle, but no appreciable relief was obtained until two ounces of blood had been drawn from the arm on Dec. 6th. This was followed by an immediate, but, unfortunately, very transitory, improvement in the general condition. Venesection was again performed two days afterwards with a similar result. There was now well-marked but not excessive œdema of the lower limbs and slight swelling of the forearms and hands, equal on the two sides. As the child's condition was becoming critical and further bloodletting was deemed useless, four short deep incisions were made over the malleoli in the hope of relieving the circulation. The serous discharge from the wounds was received into large oakum dressings, which were renewed as often as necessary under the spray. This treatment met with an altogether unlooked-for success, and for several weeks there was a steady and progressive improvement. In the course of a very few days all œdema had disappeared, not only from the trunk and limbs, but from the head and neck, the wrinkled puny face testifying to the extent of the previous distension. The incisions discharged freely for four days, and then rapidly healed. This was on Dec. 13th, and for the next seven weeks the child was better than he had been for months, almost free from dyspnœa, enjoying fairly good nights, and taking a lively interest in his surroundings. During this period of improvement the physical signs in the lungs underwent certain changes. Loud metallic crepitations and bubbling râles were to be heard all over the left lung, with tubular breath sounds in the axillary region and along the vertebral groove. The temperature remained down, and dulness had not increased. In front there was evidence of considerable compensatory hypertrophy of the right lung, with exaggerated breathing and a few moist crepitations over the right base. Condition of heart unchanged. Early in February the case took a bad turn. Without obvious cause there was a rapid return of œdema

of the head and neck, the trunk and limbs being this time unaffected. In the course of a few days there was intense cyanosis of the face and head, with urgent dyspnœa. On Feb. 14th temporary relief was afforded by bleeding from the arm, but the patient died of asphyxia on Feb. 16th. At the last moment an ineffectual attempt was made to bleed from the right external jugular vein. There was no albuminuria at any time, and the intelligence remained clear to the end.

Necropsy, twenty-four hours after death.—Very great œdema of the head and neck, slight of trunk and limbs; no scars on the neck. Head: Vena cava superior, right innominate and subclavian, right internal and external jugular veins, with superficial and deep tributaries, enormously distended with blood and dark clot. Left internal jugular vein slightly distended in its upper third. Middle third entirely occluded by an organised and firmly adherent thrombus. Lower third completely obliterated and reduced to a fibrous cord. Left innominate vein thickened and contracted, in striking contrast to its fellow at the point of union; channel obliterated by slightly adherent antemortem clot, evidently of much more recent formation than that in the left internal jugular. The orifice of the left vertebral vein occluded by a tough projecting smooth thrombus of older date. The left subclavian vein, about the calibre of a goose-quill, patent, discharging its blood into the vena azygos through the left superior intercostal, which is much enlarged. There is a good deal of condensed areolar tissue surrounding the obliterated portion of the internal jugular vein, and a small lymphatic gland is lying in close contact with it, but does not show evidence of any antecedent pathological process. Brain not examined. Thorax: Marked hypertrophy of the right lung, particularly of its middle lobe, which encroaches towards the left some distance beyond the middle line. Left lung small and shrunken. Both lungs universally adherent. Adhesions of old date, but easily broken through in removing the organs, without any damage to the lung substance. Adhesions firmest over base of left lung. Left apex separates without difficulty; no evidence here of recent inflammatory mischief or of pleural thickening. Mediastinum: Slight general enlargment of bronchial glands; no caseation; no evidence of pressure on bronchi; no condensation of tissue or other signs of previous mediastinitis. Heart: Pericardium healthy. General dilatation and hypertrophy, especially of the right cavities. No lesion of valves. Right lung bulky and crepitating. Slight dilatation of bronchi, which exude some yellowish muco-pus on pressure. Left lung shrunken and unduly firm. On section, well-marked cylindrical dilatation of bronchi, especially in the lower lobe, which is collapsed and tough. Condition less advanced in the upper lobe. No bronchial ulceration. No signs of tubercle. Abdomen: Peritoneum healthy. Three ounces of clear fluid in peritoneal cavity. Liver large, rather pale, and tough. Spleen and kidneys of normal appearance. Slight enlargement of mesenteric glands.

Remarks by Dr. PASTEUR.—At first I regarded this case as one of collapse and bronchiectasis of the left lung following pleurisy, or possibly connected with enlarged bronchial glands. But on readmission to the hospital the unequal distribution of the œdema made it clear that there was obstruction to the venous return from the head and neck, over and above that due to the embarrassed pulmonary circulation. The fact that the arms were not involved with the head, and the equal extent of the œdema on the two sides of the head and neck, made it very difficult to decide exactly where the obstruction lay. The enlargement of the left facial vein seemed to me to point to the left side of the neck as its probable site. The influence exerted on the obstruction in the neck by the state of the pulmonary circulation is very clearly shown by the rapid disappearance of the œdema of the head and neck, which immediately followed on the relief of the right side of the heart by incising the ankles. Neither the history of the case nor the post-mortem examination throw any light on the cause of the obliteration of the lower third of the left internal jugular vein, which was evidently of much older date than the occlusion of its middle third and of the left innominate vein, and may have been of congenital origin. The more recent thrombosis seems to have been directly due to the venous stasis consequent on the obstruction in the pulmonary circulation. It would thus appear that death was due to the combined agency of two distinct lesions, neither of which, by itself, would have immediately endangered the patient's life.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Etiology of Vesical Tumours.—Bone Disease in Children.—Dry Caries.—Deformities of Sternal Ends of Clavicles in Rickets.—Anomalous Appendage (? Parasitic Fœtus).—Imperforate Urethra in a Fœtus.

AN ordinary meeting of this Society was held on Tuesday last, Mr. Morrant Baker, F.R.C.S., Vice-President, in the chair.

Mr. HURRY FENWICK brought forward a series of specimens to show that irritation of various kinds plays a most important part in the production of vesical growths. He pointed out that the very earliest form of villous papilloma was to be found in a small patch of stunted papilloma known as subvilloid or cropped villi, and in most of these specimens there existed definite evidence of irritation. Thus, in a case of Dr. Beaven Rake's the patch was found at that part of the bladder which impinged against a straw four inches and a half long coated with phosphates. In Dr. Newman's case the tumour was at the apex of the bladder, and seemed due to the irritation of a large oval stone. Mr. Fenwick then alluded to age and position of villous papilloma as corroborative evidence. In carcinoma he believed that the irritation of residual urine was a most important causative factor, and quoted cases from Stockholm, Glasgow, and London.—Mr. MARMADUKE SHEILD referred to a specimen which he had shown of carcinoma of the bladder, following amputation of the penis for epithelioma, probably due to constant instrumentation and irritation of fetid urine.—Mr. F. S. EVE thought fetor was an important factor in the causation of new growths. His case of bilharzia was associated with an inflammatory, not malignant, new growth.

Mr. R. W. PARKER showed specimens of Bone Disease in Children which he described as chronic osteitis and chronic osteo-periostitis. Case 1: A child aged about nine years. Severe symptoms set in after a very slight injury; a large extra-periosteal abscess, involving the whole thigh, supervened; after many months' treatment amputation of the hip joint had to be performed. The femur on examination was found greatly thickened, and in its interior a small central necrosis was detected. The abscess cavity was situated between the muscles and the periosteum, the latter being firmly adherent to the bone, which was greatly thickened and altered in character. Case 2: A boy about nine years of age. Following a fall, a chronic thickening of the femur came on, no definite cause being discoverable until after the removal of the limb, when a small central necrosis was detected. In this case also the bone was greatly altered in character; it appeared to consist entirely of cancellous bone; the periosteum appeared unaltered, and was easily separated from the shaft of the femur. Case 3 was an example of acute necrosis of the shaft of the femur; the periosteum was widely separated from the bone, which appeared to be dead; there were no signs of repair either in the periosteum or in the bone itself. Mr. Parker contended that the specimens showed that repair in such cases depends very largely on vitality in the bone itself, and that such part as the periosteum plays in the repair depends on its being in contact with living bone. The third case, he thought, seemed to indicate that in acute necrosis the periosteum often perishes with the bone, and that then repair is impossible. Text-books, he thought, attributed too much function to the periosteum, and too little to the bone itself, which was all the more curious considering that bone was the foundation on which the body was built up, and that periosteum was only an accessory structure.—Mr. MORRANT BAKER agreed that in the first two specimens there had been osteitis, and leading to central necrosis.

Mr. F. S. EVE showed specimens of Dry Caries, which presented some peculiarities apart from the absence of suppuration. One specimen from the museum of the London Hospital was an angular curvature of the spine, taken from a man aged thirty-nine years, in whom no abscess formed, nor could any suppuration be found. A second specimen from the museum of the Royal College of Surgeons was also an example of angular curvature from the dorso-lumbar region; there was caseous material and necrosis, but no evidence of suppuration. Two other specimens showed extensive destruction of bone without suppuration; in one,

presented to the museum of the Royal College of Surgeons by Mr. Jonathan Hutchinson, the os calcis was replaced by fibrous tissues, and there was no evidence of tubercle; the cases ought not to be confounded with rarefying osteitis occurring in connexion with simple inflammatory action or with tuberculosis.—Mr. MARMADUKE SHEILD said that many of the cases of dry caries of the spine were associated with caseation, as in one of the specimens shown. In such a case, where the caseous matter was enclosed in a distinct sac, he thought it most probable that there had been suppuration, and that the fluid part had been absorbed, leaving a caseous mass. Paraplegia was not infrequent where abscess was not present, or at least apparent; while where suppuration was present paraplegia seldom occurred.—Mr. MORRANT BAKER thought this was an interesting clinical observation, which his experience confirmed.—Mr. R. W. PARKER had found, from the examination of a large number of reported cases, that abscess occurred less frequently the higher up the vertebral column was diseased, which might account for the frequency of paraplegia without suppuration.—Dr. ANGEL MONEY agreed with Mr. Sheild's statement, as did also Mr. WALSHAM.—Mr. EVE replied.

Mr. W. G. SPENCER showed a child with Rickets and Deformity of the Sternal Ends of the Clavicles. Sappey and others said that there was no epiphysis till twenty years of age, and then it was only slight; the clavicle was very early ossified. Mr. Spencer discussed the etiology of the sternal thickening, and thought there was a definite enlargement at this site of deformity, which was very unusual.—Dr. PENROSE suggested that a green-stick fracture was the mechanism of the deformity.—Dr. ANGEL MONEY agreed with Dr. Penrose.—Mr. BRODIE asked if the sterno-mastoid were not inserted into the boss.—Mr. BLAND SUTTON said the boss was in the line of action of the sterno-mastoid, and these acting violently in whooping-cough would perhaps explain the symmetry of the bumps.—Mr. SPENCER thought it remarkable for green-stick fracture to occur symmetrically.

Mr. EDMUND OWEN showed a case of Anomalous Appendage. The child was eleven weeks old. The rounded swelling was situate at the lower part of the back, and measured 3½ in. by 3½ in., and projecting ¼ in. The lower limit was just above the fold of the nates. The tumour was a little to the left of the middle line, and presented in the exact centre an umbilication. Half-way between the dimple and the lower border and slightly to the left of the middle line was a soft appendage about two inches long, and having somewhat the appearance of a fat little finger; the base of the appendage was constricted. On the left side of the base of the appendage was a second small excrescence a quarter of an inch long. Both hands were badly developed, being smaller than natural; all other parts of the body appeared to be normal. The child was born at full term, and there was no history of deformity in the family. Mr. Owen suggested that the rounded swelling was the result of spina bifida, while the appendage, and perhaps the tumour also, was the result of an imperfect attempt to produce a double monster. The sacral region was by no means an infrequent site for the attachment of a fairly developed or rudimentary fœtus.—Mr. MORRANT BAKER and Mr. J. B. SUTTON both agreed that the case was an example of parasitic fœtus.—Mr. SUTTON observed that if during development the medullary fold remained cleft, two complete fœtuses were formed from a single ovum. This was probably the explanation of twins of the same sex in one amniotic sac. From this there was every degree of combination from Siamese twins to such a case of very rudimentary fœtus as that shown by Mr. Owen. Mr. Sutton also remarked that a very interesting specimen of parasitic fœtus was now on exhibition in Tottenham-court-road. The fœtus was attached by a broad pedicle to the umbilicus of a boy aged sixteen. Pinching the great toe of the fœtus when the boy's attention was drawn off proved that there was no definite nervous communication between the host and the parasite.

Mr. S. G. SHATTOCK showed a specimen of Distended Bladder with Imperforate Urethra from a fœtus of four months. The abdomen was greatly distended, and when opened was found to contain a large cavity having its own proper wall, into which the two dilated ureters open. The kidneys measured 1·5 centimetre in vertical length, and were admirable specimens of general cystic disease. The cause of the distension in this case was complete atresia of the bladder and imperforate condition of the urethra. It would be interesting to know whether the imperforate urethra was due to original want of development or to changes occurring after its formation. The importance and amount of the urinary secretion during intra-uterine life was possibly illustrated by the degree of distension of the (?) urogenital sinus.

The following card specimens were shown:—

Mr. CHARLES STONHAM: Specimens illustrating the Anatomy of Rheumatoid Arthritis and Gout.

Mr. W. G. SPENCER: Deformity of Sternal End of Clavicles in a Rickety Child.

Mr. WALTER K. SIBLEY: Double Intussusception in a Baboon.

Mr. C. MANSELL MOULLIN: Transverse Fracture of Patella, with Osseous Union.

Mr. F. S. EVE: Urinary Bladder and Kidney from a case of Bilharzia Hæmatobia.

Mr. D'ARCY POWER: Angeioma of Cerebral Membranes.

Mr. JOHN H. MORGAN: Femur with newly-formed Bone from a case of Pyæmia in an Infant.

MEDICAL SOCIETY OF LONDON.

Empyema.—Estländer's Operation.

AN ordinary meeting of this Society was held on Feb. 6th, the President, Dr. J. Hughlings Jackson, F.R.S., in the chair.

A paper was read by Dr. CHURTON of Leeds on some varieties of Empyema. He divided the disease for practical purposes into three sets or species, according to their position on the outer, the basal, and the inner aspects of the lung. By combination basi-external and basi-internal empyemas were formed. Varieties were caused by adhesions, by differences in the pus, and by differences in the size and shape of the chest wall. Diseases of other organs might also coexist, either directly causing the empyema or complicating its treatment. The first and most common species gave usually little trouble; the second and third were difficult. Cases of basal and internal empyema were related. In one the pus, about an ounce and a half, had not been reached by two operations with excision of part of a rib; it lay surrounded on all sides and concealed by a thick layer of spongy tissue, in the innermost corner anteriorly of the left pleura. Another and very similar case of basal empyema, which occurred in a girl aged thirteen, was described. This had almost recovered spontaneously, but two ribs were partially necrosed. It was pointed out that in verifying the diagnosis of such cases not only repeated but very methodical explorations were required. A case was mentioned in which seven such explorations were made before the pus was found. A case of empyema in the inner surface of the left upper lobe, in a man aged forty-seven, was described. In three cases out of eighty which had been under the author's care, the pus-like fluid was in two found to contain, not pus-cells, but cholesterin, and in a third case minute fat-globules. The latter case and one of the former were cured by aspiration alone. In one case the pus was outside the pleura; and in two children with so-called "turtle-lung," general dilatation of the bronchial tubes partially simulated empyema. Five cases of fetid empyema, four of which readily recovered, were mentioned, and the causation discussed. The treatment of double empyema, and the danger of aspiration and of too sudden removal of tension even by incision, in cases associated with heart-disease or great debility, were dealt with, and illustrative cases given.

Mr. PEARCE GOULD read notes of four cases of Estländer's operation, or Thoracoplasty. The procedure, he pointed out, should be distinguished from simple removal of one portion of a rib in the operation for draining an empyema: he advocated a vertical incision in preference to a flap: careful digital exploration of the cavity before removing the bones; complete separation of the periosteum, which should be preserved; and removal of the dense, thickened pleura with scissors. A full account of the cases will be found in another part of our present issue.

Dr. DE HAVILLAND HALL related a case of empyema in a watchmaker, aged twenty-five, who was admitted into the Westminster Hospital under his care in 1884. The patient gave a history of fistulous empyema on the left side dating from 1882. He was pale and emaciated, with marked clubbing of the fingers, and the urine contained a trace of

albumen. Mr. Boyce Barrow made a counter-opening in the tenth interspace behind the angle of the scapula, the tenth rib being gouged so as to allow of a free passage for the drainage tube, which was passed through the pleural cavity and the ends secured to one another externally. The cavity was washed out with astringents and antiseptics, which, though it diminished the amount of secretion, was ineffectual in checking it entirely. The patient's general health improved, but the drainage tube could not be dispensed with. So in May, 1887, Mr. Barrow removed almost an inch of the eighth and ninth ribs. The dressings were left off in August; and in September, on examination, there was no appearance of discharge, the chest wall had fallen in considerably, and his general condition was very good. The patient was shown to the Fellows of the Society. Dr. Hall remarked on the immediate good effect which followed the making of a counter-opening in the most dependent part of the pleural cavity. He pointed out that some cases of empyema were benefited by the use of astringent and other injections, but he did not advocate their general employment, as washing out the pleural cavity was not unattended with risk, and in the case under consideration unpleasant symptoms occurred on two occasions while the proceeding was being carried out. Dr. Hall drew attention to the success which in this case had attended the removal of portions of two ribs, and suggested that in cases of chronic empyema, before having recourse to Estländer's plan of the removal of portions of six or seven ribs, it might be well to try the effect of a more limited operation, and in the event of its failure a more extensive removal of the ribs might be undertaken.

MR. ASTLEY BLOXAM brought forward the case of a butler aged twenty-seven, who was admitted into Charing-cross Hospital in January, 1886. In May, 1885, he had inflammation of the lungs and pleura, and three weeks afterwards, what he called rheumatic fever. On admission he had signs of empyema, and had been coughing up on an average eighteen ounces of pus daily. In February an incision was made into the sixth intercostal space, permitting the escape of much fetid pus, and a large drainage tube was inserted. In April he left the hospital, the wound still discharging. In October he was readmitted with increased discharge, an L-shaped incision was made in the right side of the chest; and portions about three inches long of five ribs were removed, the periosteum being previously stripped off. The hand passed into the pleural cavity felt the lung contracted to half its normal size, and a drainage tube four inches in length was found in the lower and back part of the pleural sac. The horizontal incision was united by silver wire, the vertical one being left open. The patient improved very much in health, but the discharge, though it gradually decreased, did not entirely cease, and was at times most offensive, so in January, 1887, a further removal of ribs was undertaken. A mass of bone was taken away, which had been thrown out from the periosteum left in former operations, and from sawn-off ends of bone. Portions of the third, fourth, and fifth ribs were removed, and a futile endeavour made to fracture the first and second. A large drainage tube was passed in, and the cavity washed out with boric lotion. The discharge diminished rapidly; in April a flap of skin was removed to prevent too rapid closing over of the cavity, which was quickly contracting, and in August the wound was soundly healed. Since this date the patient rapidly gained in weight, and had now returned to his duties as a butler. The points worthy of emphasis in the case were the importance of obtaining good drainage, which must be free and continuous, the large amount of rib that could be removed without harm following, and the completeness of the recovery.

Dr. SYMES THOMPSON thought Dr. Hall's suggestion a good one: that at first portions of one or two ribs should be removed, and then, if failure resulted, the more severe operation could be attempted. These cases very well showed that fetid discharge, albuminuria, enlarged liver, or disease of the opposite lung, need not make us despair of obtaining a good result. He was glad to hear Dr. Churton dwell upon the necessity of methodical explorations in order to discover local collections of pus in the pleura. Mr. Godlee, at the Brompton Hospital, had met with no success in empyema by introducing prepared sponge into the pleura.—Dr. WHITE said that in Mr. Gould's fatal case the lung was so shrunken and the cavity so large, that even when the ribs were gone it was a matter of difficulty to close it. The condition of the patient's heart was quite sufficient to account for the fatal result.—Mr. R. W. PARKER recommended, before resorting to so severe a procedure as Estländer's operation, that the pleural sac should be scraped out. He had met with much success in children by adopting this measure. In one case of chronic empyema, after scraping, he had introduced some prepared sponges, with the result of hastening the closure of the cavity.—Dr. CHURTON said his usual practice was to make the opening for drainage in the ninth space and post-axillary line. Mr. GOULD considered Estländer's operation only suitable in a very small number of cases where milder methods had failed. The best place for an opening was that part of the cavity which closed last, and this was usually in the middle zone of the chest opposite the sixth or seventh interspace.—Dr. HALL maintained that the best place for the opening was the most dependent part.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of the Society was held on Feb. 1st, Dr. John Williams, President, in the chair.

Mr. MEREDITH showed two large pedunculated Fibroid Tumours, in both of which axial rotation had occurred, and in one to an extent involving occlusion of the cervical canal and retention of menses.

Dr. LEWERS exhibited the Cervix Uteri removed by supra-vaginal amputation on account of Carcinoma from a patient in whom abortion had been induced at the fourth month a fortnight previously.

Dr. CARTER showed an Epitheliomatous Growth removed from the Cervix by galvano-cautery.

Dr. W. DUNCAN exhibited Ovaries and a piece of Jejunum, the latter showing perforation after ovariotomy.

Dr. W. S. GRIFFITH introduced a specimen of Myxoma Fibrosum of the Chorion.

Dr. HERMAN and Dr. C. O. FOWLER brought forward a paper on the Effect of Ergot on the Involution of the Uterus, in which it was stated that the administration of a tonic mixture containing ergot during the lying-in period had often been recommended. This recommendation was based upon a general knowledge of the action of such drugs and of the process of involution. No observations had been made, so far as the authors were aware, as to the actual effect of this treatment upon the progress of involution. They had sought to ascertain its effect by measuring the height of the uterus above the pubes on successive days of the lying-in, in two sets of patients—one set (fifty-eight in number) treated with an ergot mixture for a fortnight after labour, the other set (sixty-eight in number) given a single dose of ergot after labour and no more. They found that in the cases treated by the continuous administration of ergot the uterus diminished in size more rapidly than in those in which one dose only was given. They compared the two sets of cases as to the duration of the lochial discharge, but on this they did not find that the ergot treatment produced any appreciable effect. A table accompanied the paper.—Dr. BOXALL contrasted two series of cases, each referring to 100 patients. Every alternate patient admitted to hospital was given a mixture three times a day, containing ext. ergotæ amm., fifteen minims for a dose during the first three days of lying-in. To avoid fallacy in the comparison, the two series of observations were carried on simultaneously. The ergot mixture was given in the first series. In the second its routine administration was omitted; but in the series are included thirty-one patients for whom, on account of hæmorrhage, severe after-pains, &c., ergot was subsequently prescribed. The results are presented in a tabular form. By contrasting the two series of cases, Dr. Boxall concluded: 1. That though the routine administration of ergot during the first three days of the puerperium exercises no appreciable effect on the date at which the lochia cease (in this respect confirming the observations of the author of the paper), the practice of giving ergot mixture during the three days following delivery tends to prevent the formation of clots and to hasten their expulsion, and to diminish the frequency, intensity, and duration of the pains. 2. That if omitted at first, but given after, the ergot mixture tends to promote the expulsion of clots and to relieve after-pains.—Dr. BOXALL considered that (*a*) the routine practice (which he had followed) of administering a douche at from 110° to 115° F., not only immediately after labour, but also twice a day during the puerperium until the lochia ceased (a powerful

stimulant to the uterus), (*b*) the ergot which was given in every case immediately after labour, and (*c*) the ergot mixture which was prescribed subsequently in thirty-one of the cases included under the second series, all tend to lessen the difference which he had shown to exist between the two, and that in consequence the beneficial effect of the ergot mixture is even greater than that shown by the figures given in the tables.—Dr. DAKIN had made observations as to the effect of systematic administration of ergot for some days during the puerperium on cases in the General Lying-in Hospital while he was house physician. They did not support the view which the authors took, but showed that the average day when the fundus had sunk to the brim was 9·12, when ergot was given once only; 10·3 when ergot was given daily for three days. There were, however, other fallacies than those named by the authors; for, in addition to the condition of the bladder, rectum, thickness of abdominal wall, and weight of the uterus in the pelvis, there was the condition of the uterine axis, whether flexed or inclined, antero-posteriorly or laterally. He had found in a number of consecutive cases taken at random that one-sixth of the uteri were in the axis of the body. These ought not to be compared with cases of anteflexion and anteversion usual to the uterus during the puerperium, as there might be a difference of three inches or more on this account alone. In one of Dr. Dakin's cases the fundus was found one day in the left hypochondriac region nine inches from the pubes, whereas in the next it was to the right of the middle line, and only measured five inches and a half. He agreed with Dr. Boxall that the lochia were a better criterion of the rate of involution, and in this his own figures did not agree with the author's, for with one dose of ergot the average was 9·8, with three days of ergot 11·6. With reference to the retention of clots and the occurrence of after-pains, he found that, out of ninety-two cases where ergot was given for three days, 51=55·4 per cent. had after-pains, and 22=23·9 per cent. passed clots. Out of 103 cases where only one dose of ergot was given, 64=62·136 per cent. had after-pains, and 14=13·592 per cent. passed clots; so that the ergot cases had fewer after-pains, but passed more clots. The unergotised cases, like Dr. Boxall's, passed clots up to the tenth day, whereas the ergotised ones passed no clots after the sixth day. It seemed that the continuous use of ergot by keeping up a tonic state of contraction, instead of allowing normal alternate contraction and relaxation, would tend to favour retention of clots, and to prevent the normal process of involution. This was to a great extent borne out by his figures.—Dr. SWAYNE wished to know if chloroform was used during delivery, and in how many of the cases? In order to ascertain accurately the effect of ergot given after delivery, in his opinion it was necessary to remove all disturbing influences, such as the administration of anæsthetics during labour.—Dr. HERMAN, in reply, said that the cases observed by Dr. Dakin (which seemed to support an opposite conclusion to that arrived at by Dr. Fowler and himself) were only given ergot for three days, while their cases took it for a fortnight, and he did not therefore regard the two sets of cases as strictly comparable. The sources of error from the mode of measurement pointed out by Dr. Dakin had been present to the minds of Dr. Fowler and himself, but there was no other mode which was not attended with sources of fallacy. Such errors as arose from anteversion and anteflexion of the uterus were equally distributed among the two sets of cases, and so did not vitiate the comparison. Dr. Fowler and himself had paid particular attention to the occurrence of lateral displacement, and had found that it depended in the majority of cases on the position in which the patient had been lying. They had not referred to it in this paper, as it did not seem to have any important bearing on the subject. In reply to the question of Dr. Swayne, chloroform had been given in six of the cases—viz., three of each series.

The business of the annual meeting then commenced. The report of the auditors of the accounts of the treasurer for the year ending Dec. 31st, 1887, was read, and showed a considerable increase of invested funds and balance at the bank. It was proposed by Dr. C. H. Routh, and seconded by Dr. Rogers, and carried, that the report be received, adopted, and published in the Transactions.

The officers for 1888 nominated by the Council were declared to have been elected by ballot.

A satisfactory report was read regarding the Society's library, together with a list of donations of volumes and specimens received during the year. Dr. Herman proposed and Dr. Gibbins seconded, and it was carried, that this be adopted.

The report of the examinations in Midwifery for the diploma of the Society showed that ninety-six candidates had satisfied the examiners during the year, and that in this department valuable work was being done. Dr. Galabin proposed and Mr. Meredith seconded the resolution adopting this report.

The President then delivered the annual address, at the conclusion of which a vote of thanks was passed on the motion of Dr. Braxton Hicks, seconded by Dr. Swayne.

Dr. Potter proposed a warm vote of thanks to the retiring officers, which was seconded by Dr. Boxall, and responded to by Dr. Champneys and Mr. Alban Doran.

HARVEIAN SOCIETY OF LONDON.

A MEETING of this Society was held on Feb. 2nd, the President, Dr. Wm. Sedgwick, in the chair.

Dr. DOWN read a case of Fatal Intestinal Obstruction due to a rare form of internal hernia. The patient was a woman aged fifty-six; no children. The symptoms of obstruction were fairly acute. Manual exploration of the rectum gave no result. Abdominal section was discussed, but was not performed. After death the cæcum was found near the middle of the abdomen, and, together with the ileum, was obstructed by a band, which proved to be the right Fallopian tube, which was greatly elongated, and adherent to the ileum and duodenum. Death was due to perforation of the cæcum, followed by fæcal extravasation. Dr. Down thought the post-mortem appearances showed that the abdominal section might have been successful, although the Fallopian tube would have required division.—Mr. LOCKWOOD remarked upon the position of the perforation, and said it was in the usual place. He thought an exploratory operation would have offered a chance of relief.—Mr. D'ARCY POWER wished to know whether there was any history of previous attacks of peritonitis.—Dr. HANDFIELD JONES remarked upon the rarity of the condition, and wished to know whether the Fallopian tube was adherent to the cæcum.—Dr. DOWN, in reply, said there was no history of previous attacks, and thus the Fallopian tube was adherent.

Mr. HERBERT ALLINGHAM then read a case of Suture of the Internal Semilunar Cartilage of the Knee to the Head of the Tibia. The patient was a man aged thirty-five, who had been constantly laid up by slipping of the internal fibro-cartilage of his knee. An incision two inches long was made with its centre over the cartilage. The knee joint was opened, and a strong catgut suture passed through the internal fibro-cartilage and the periosteum of the upper end of the tibia. The joint was washed out with carbolic lotion, and the synovial membrane united with deep catgut sutures. The wound was then closed without drainage. The patient, who was shown to the Society, made a good recovery, and can now follow his employment.

Notices of Books.

Year-book of Treatment for 1888. London: Cassell and Co. 1888.—This useful publication has now reached its fifth year of issue, and there is no indication of any decline in the industry of the contributors, in the collection of fit materials, or in the critical value of their remarks on new therapeutic procedures. On the contrary, experience seems to have perfected their judgment, and led them to exclude many crude observations, which only serve to cumber medical practice instead of aiding its progress. Indeed, if this work had no other merit, its contributors are deserving of thanks for sifting out the superficial and hypothetical from the true and practical work done in therapeutics. No branch of medicine requires more careful consideration of the relation of cause to effect, and there is none in which a superficial observer is more likely to be misled than in therapeutics. Careful criticism is therefore all the more needed. But the present work is useful not only in presenting us with a select epitome of the year's best thera-

peutic work, but is valuable for the independent comments of the individual contributors to the various sections of the volume—a value enhanced by the care taken to entrust the work to thoroughly representative men. It would be invidious for us to select special articles for commendation where all are so good, especially since the value of each article must depend largely on the material the writer has to deal with. Indeed, our space forbids us to do more than enumerate a few points that appear of more than usual interest. Thus the article on the treatment of the Diseases of the Lungs and Organs of Respiration is almost a complete epitome of the treatment of the lungs generally, whilst the profession will read with interest the remarks on Bergeon's treatment of phthisis by injections of sulphuretted hydrogen. The article on Diseases of the Stomach, Liver, and Intestines is characterised by the practical common-sense comments appended to most of the paragraphs on special modes of treatment, and which are just as they should be—brief and to the point. The article on Diseases of the Kidneys and Diabetes gives a *résumé* of the treatment of nephritis as advocated by Nothnagel and Semmola respectively, and also discusses the views held as regards certain dietetic questions in chronic renal affections upon which opinions are divided. With regard to diabetes, occasion is taken to remark on the importance of determining in each instance not only the patient's tolerance for opium, but the special aptitude for different preparations of the drug, and the individual dose that has the greatest effect in restraining sugar excretion. In the article on Surgical Diseases of Children, the author discusses the value of intubation of the larynx as compared with tracheotomy; whilst in the section set apart for General Surgery, the various intra-peritoneal injuries for which laparotomy is called for and the conditions requisite to ensure success are enumerated. The various methods of applying remedies to the skin, by means of improved forms of inunction, are fully described, and the value of the article is enhanced by the publication of the formulæ in full. In fact, the whole volume is full of good things, and will prove a great boon to the busy practitioner.

"*Nor'ard of the Dogger," or Deep-sea Trials and Gospel Triumphs; being the Story of the Initiation, Struggles, and Successes of the Mission to Deep-sea Fishermen.* By E. J. MATHER. Pp. 376. London: James Nisbet and Co. 1887.—This is an interesting account of a great philanthropic work which has been going on for the last five or six years with considerable success, and has conferred substantial benefits on a previously neglected, but very hard-working class of men. It appears that there is a population of upwards of 12,000 fishing smacksmen who spend the greater part of their lives upon the North Sea; after a trip of eight weeks' duration they return to harbour for a few days to refit, and then start again for the fishing grounds, through all seasons and in all weathers. The volume before us gives a graphic account of the hardships the men undergo, the loss of life among them, and the numerous severe injuries to which they are liable in the performance of their arduous labours. Prior to the autumn of 1881 there seemed to have been no one who took a practical interest in their welfare. No provision was made for their spiritual, moral, or physical wants; and they were exposed to great temptations by the presence in the fleet of floating grog shops, principally Dutch, where alone they could procure tobacco at a reasonable price, and where they were tempted by the skippers to spend all their hard-earned money in drink, and on many occasions to steal and sell for drink anything they could lay their hands on—fish, spare sails, nets, ropes, &c. In 1881 this disgraceful state of affairs was brought to the notice of Mr. Mather, who determined to verify personally the statements which had been made to him regarding the helpless and hopeless condition of these sailors. He accordingly made a trip in one of the steamers which collect and bring to market the fish from the smacks. He found that the descriptions he had received were by no means overcoloured, and resolved to do everything in his power to remedy the evils of which he had just gained a practical knowledge. After due consideration, and with the assistance of friends, in the summer of 1882 a fishing smack was bought, which, after the necessary alterations had been made, was despatched to join the fleet as the first mission ship. She took out a good supply of books, woollen mufflers and mittens supplied by some ladies, and a large ship's medicine chest. The result, in the addition to the comfort, instruction, and well-being of the fishermen, was most gratifying, and since that period five or six mission vessels have been provided, one of which was unfortunately run down at sea. Divine service is held on board these mission ships whenever the weather permits. "Clergymen and laymen go out on the mission ships throughout the summer to minister to the smacksmen," and "the skippers, and, as far as possible, the crews are chosen for the service by reason of their special aptitude." On various occasions medical friends of the author and medical students have gone out to render service to the mission, and through it to the smacksmen. All the ships have a carefully fitted dispensary on board, and the skippers have received instructions in "first aid to the injured," and are thus enabled to give efficient relief in many cases of serious accidents. By a judicious arrangement for the sale of tobacco at a low price and for the supply of many comforts, especially in the way of warm clothing, the mission has been able to improve materially the condition and reform the habits of these men, and to get rid, to a great extent at least, of the floating sinks of iniquity, the "coper" vessels. The beneficial influence of the mission ships is very clearly shown in the greatly improved conduct of the fishermen and condition of their wives and children who now receive the earnings which previously went too often into the cash-box of the "coper." We recommend a perusal of this book to such of our readers as take an interest in the spiritual and temporal welfare of a hardworking, honest, and hitherto neglected body of our countrymen; and we feel sure that one result will be an addition to the funds of the Deep-sea Mission. The mission vessels are "at once the church, chapel, hospital, library, club, temperance hall, and school"; and it is gratifying to know that these advantages are fully appreciated by the men for whom they are provided. The volume is well got up, and the narrative very readable.

Guy's Hospital Reports. Edited by N. DAVIES-COLLEY, M.B., F.R.C.S., and W. HALE WHITE, M.D. Vol. XLIV. London: J. & A. Churchill. 1887.—After the two excellent "In Memoriam" tributes to Walter Moxon and John Cooper Forster comes an article entitled "Observations on Prognosis," by Dr. Pye-Smith. Some originality may be claimed for writing a separate paper on prognosis, but we have failed to find in this article anything which is essentially novel. Dr. Savage writes well on "Some Modes of Treatment of Insanity as a Functional Disorder," and says much that is of value in practice: what a contrast is his method with that of the first half of the present century. Mr. Newland Pedley writes that reform is needed in the dental departments of hospitals, in order to vindicate the claims of dentistry to the position of a specialty in surgery, and to erase a defect in the educational scope of medical schools. Mr. Clement Lucas describes two hitherto undescribed Dislocations: (1) dislocation by rotation backwards at the wrist joint; (2) mid-manual dislocation backwards. Dr. L. Shaw contributes cases of Hæmorrhage occurring during treatment by Salicylate of Soda. "Reminiscences of Provincial Surgery" is from the pen of an "Old Guy's Man," Dickinson Crompton, F.R.C.S., and communicated by Mr. T. Bryant; it will be read with interest. Mr. L. A. Dunn gives a case of Fractured Pelvis, and Mr. H. J. Campbell writes on

Diabetes Mellitus. The list of references to the literature of the subject is valuable. Dr. Goodhart describes the list of specimens added to the Pathological Museum. Mr. Arbuthnot Lane treats of the causes of several of the deformities which develop during young life. Dr. Goodhart contributes some instructive cases of Angina Pectoris; Mr. Newland Pedley, an article on Cocaine in Dental Practice; Mr. Arbuthnot Lane, Changes in the form of the Acetabular Cavities, Spinal Column, and Joints of the Hand; Dr. Newton Pitt, a very interesting case of Friedreich's Disease; and Mr. Davies-Colley contributes some remarks on Compound Fractures of the Long Bones.

Experimental Chemistry for Junior Students. By J. EMERSON REYNOLDS, M.D., F.R.S., F.C.S.; Professor of Chemistry, University of Dublin; Examiner in Chemistry, University of London. Part IV.: Chemistry of Carbon Compounds or Organic Chemistry. London: Longmans, Green, and Co. 1887.—This part completes Professor Reynolds' small but excellent text-book. In the four post-octavo volumes no less than 815 experiments are described. The directions are in almost every case simple, and yet sufficient; and there is enough theoretical matter to enable the student not only to understand, but to reason from, the experiments he performs. We fear, however, that very few students, except those who intend to make chemistry a profession or to adopt pure science as a vocation, will be able to spare time for such a course. As matters now stand, it is certainly out of the question as regards medical students. We should be glad to learn from the author his own experience as to how much time is required for each of the four courses.

Handbook of Modern Chemistry, Inorganic and Organic. For the use of Students. By CHARLES MEYMOTT TIDY, M.B., F.C.S., Professor of Chemistry and of Medical Jurisprudence and Public Health at the London Hospital, &c. Second Edition, revised and enlarged. London: Smith, Elder, and Co. 1887.—The new edition of this well-known book does not exhibit any features calling for special comment. The author has wisely discarded Dr. Frankland's notation, which has not met with general acceptance, and has brought his own work well up to the present state of knowledge. The arrangement adopted is peculiar, and we cannot approve of it in all respects; but the book contains an immense collection of facts, and is of a practical and really valuable kind.

The Student's Handbook of Chemistry. With Tables and Chemical Calculations. By H. LEICESTER GREVILLE, F.I.C., F.C.S., &c., Chemist to the Commercial Gas Company, London. Second Edition. Edinburgh: E. & S. Livingstone. 1887.—This unpretending little manual evidently supplied a want, for it has reached a second edition. It is comprehensive, clear, and, as far as we have tested, accurate. It includes inorganic and organic chemistry and a good deal of analytical detail. The new edition has evidently been revised with care.

Schmidt's Jahrbücher der Gesammten Medicin. Band 217. No 1. Leipzig: Otto Wiegand. 1888.—When a serial attains its 217th volume it may be regarded as no longer liable to the vicissitudes and winds of popular favour. Those who wish to see in brief compass notices of the advances that are being made in all departments of medical science cannot do better than commence the first number of the present volume.

The New Sydenham Society's Lexicon of Medicine and the Allied Sciences (based on Mayne's Lexicon). By HENRY POWER, M.B., and LEONARD W. SEDGWICK, M.D.—The fourteenth part of this lexicon—Ilo-Kid—has just been issued, and, from the accuracy of its contents and the extent of information and references contained in it, affords, like the preceding parts, testimony of the wisdom of those by whom the compilers of the entire work were nominated.

THE PARKES MUSEUM.

PROFESSOR CROOKSHANK'S lecture on "The History and Present Position of the Germ Theory of Disease," which was given on Thursday, February 2nd, was listened to by a full audience, which was a superior and intelligent one. The first half-hour was devoted to a historic summary, beginning with the notions of the earlier workers in the middle of the seventeenth century, and finishing with the more recent workers—Cagniard Latour, Schwann, Davaine, Pasteur, and Koch. This portion of the lecture abounded in facts and interesting matter.

Interesting as was the first part of the lecture, it was the second half which constituted its chief feature, and which evidently produced upon some members of the audience an effect which in all soberness must be spoken of as startling. By the aid of the oxy-hydrogen microscope (which was ably manipulated by Mr. Swift), photographs of actual microscopic preparations were thrown upon the screen, and in rapid succession the forms of all the well-known micrococci, bacteria, bacilli, and spirilla (some shown in pure cultivation, and others inhabiting diseased organs) passed in review before the audience. The photographs as thrown upon the screen gave an amplification of 30,000 diameters, and this served to bring out in a very marked manner the great differences in form and habit of these organisms, which the uninitiated are apt to regard as indistinguishable. Pictures and diagrams are all very useful, but they do not carry conviction to the mind as completely as do photographs. Looking at Professor Crookshank's beautiful photographs, one felt that, in so far as the existence of a great variety of microbes is concerned, no possible room could be left for doubt, and that the most hardened sceptic would scarcely venture to "pooh-pooh" a microbe when its photographed image, some inches in length, was staring him in the face.

In proposing a vote of thanks to Professor Crookshank, Dr. Poore (who was in the chair) expressed his belief that the audience would agree with him that the result of so much research, thought, ingenuity, and expenditure had rarely been brought to so fine a focus in so short a time as on that occasion. The Council of the Museum felt deeply indebted to Professor Crookshank.

The next lecture will be on "Plagues Ancient and Modern," by Dr. J. F. Payne.

ARMY MEDICAL SCHOOL.

THE winter session of the Army Medical School at Netley was brought to a close on the 2nd inst. Mr. George Pollock, Consulting Surgeon to St. George's Hospital and the Examiner in Surgery for Her Majesty's Army, Navy, and East India Medical Services, came from London, accompanied by the Director-General of the Army Medical Department, and Sir Joseph Fayrer, Physician to the Indian Council, to hand the prizes to the successful surgeons on probation. After giving the prizes with appropriate remarks to each recipient, Mr. Pollock delivered an address, taking for his text the imperative necessity for continuous research and labour in the medical profession, and the almost unlimited opportunities for valuable sanitary and medical work presented by the vast territory of India in which the surgeons on probation were destined to pass a great portion of their future careers. The only probationers who had passed through the courses of instruction during the session were candidates for commissions in the Indian Medical Service. At the close of Mr. Pollock's address, Sir Joseph Fayrer, speaking from his Indian experience, gave some encouraging remarks to the young surgeons, saying that he regarded the Indian as still, without exception, the finest medical service in the world; and Sir Thomas Crawford, in expressing thanks to Mr. Pollock for his attendance as well as for his address, mentioned the gratification he had derived from the very favourable reports which had reached him, not only regarding the conduct and diligence of the surgeons on probation, but also the manner in which the class of surgeons who had been at Netley during the session had taken advantage of the opportunities of study presented to them. The proceedings then terminated.

We publish in another column the names and positions of the surgeons on probation who have gained their commissions, and the names of those who carried off the prizes.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 11, 1888.

TRUE to their ethical traditions, by the large majority passing the resolution which we reported in our issue of last week, the full Comitia of the Royal College of Physicians, assembled on Thursday, February 2nd, have nobly and completely vindicated themselves from the suspicion which has been freely expressed that they would not call any Fellow, Member, or Licentiate to account for contributing articles on professional subjects to journals professing to supply medical knowledge to the general public, or in any way advertising himself or permitting himself to be advertised. Our only regret is—and we are quite certain that the "majority" of Fellows shared it with us—that the resolution was not passed unanimously. Still, this result is hardly surprising when we consider that there were several gentlemen present who were in one way or another concerned in the practices against which the resolution was directed. This was shown especially by the second amendment which was proposed, and which opened a loophole by which those indicated might escape publicity. It was, we believe, to the following effect:—"That the College, while approving the recent action of the Censors' Board and recording its disapproval of any Fellow, Member, or Licentiate advertising himself or permitting himself to be advertised, is of opinion that special cases like the present should be dealt with on their own merits by the Censors' Board, who are invested with adequate authority and in whose judgment the College has the fullest confidence." However, Sir WILLIAM JENNER brought back the discussion to its original position, and, from his well-known opinions, to which during his six years' tenure of office as President he has not failed to give effect, we can almost hear the words with which he convinced those waverers who showed an inclination to satisfy themselves by accepting the amendment. We can imagine his words of candid criticism and kindly censure mingled with an almost parental consideration for the honour of the College over which he presides, and his words of friendly warning as to the watchful eye which the Censors' Board intend in the future to keep over the acts of its Fellows, Members, or Licentiates who may be inclined again to err. Not only the Council of the College, but the profession at large, must feel grateful to the Censors' Board for the care and labour they have bestowed on the conduct of this necessary investigation, and will join us in congratulating them on the successful and satisfactory termination of their work. In their correspondence with the gentlemen from whom they felt bound to demand an explanation of certain proceedings connected with their advocacy of and active assistance in the promotion of popular medicine, the answers they received must have been of a somewhat amusing character. However, we must consider that the explanations were satisfactory, as they all promptly retired from their questionable position, and, we may suppose, promised amendment.

On behalf of the profession at large we regret that the meetings of last and the preceding week were held under the *secreta collegii* bye-law, and that thus the manner in which each Fellow voted and the sentiments uttered by each speaker on the occasion remain unknown save to those present. No doubt, when the Comitia of Fellows are considering the social, moral, and professional character of those Members whom they contemplate raising to the rank of Fellows, the exercise of the rule of secrecy is an absolute necessity; but in an instance like the present, when the subject under discussion is of widespread and general importance and interest, such a regulation acts detrimentally, and might, we opine, have with advantage been dispensed with. From several letters which we have received on this subject we select for publication that of a leading "Junior Fellow," which appears on another page. The opinions of this gentleman are from his position deserving of attention, and reflect, we are convinced, those held on the subject by the large body of physicians and surgeons as well as the general practitioners with whom they are so intimately connected.

Thinking it to be for the advantage of our readers to have before them at one glance the opinions on the subject of popular medicine of the two English Medical Colleges, we reproduce them here *verbatim*. The resolution passed by the Fellows of the Royal College of Physicians on Feb. 2nd is as follows:—

"That it is undesirable that any Fellow, Member, or Licentiate of the College should contribute articles on professional subjects to journals professing to supply medical knowledge to the general public, or should in any way advertise himself or sanction his being advertised in such journals."

The resolution which was passed on Dec. 8th, 1887, by the Council of the Royal College of Surgeons, is as follows:—

"That in the opinion of the Council of the Royal College of Surgeons it is most objectionable that Fellows and Members of the College should allow their names to be advertised in connexion with medical or surgical subjects in popular journals."

Considering the satisfactory ending of the praiseworthy attempts on the part of the two Colleges to deal with the questions referred to above, as evidenced by the passing of these resolutions, we do not regret the space we have devoted in our columns to drawing attention to the evil, and thus indirectly assisting the Colleges to formulate the matter which has been the subject of recent professional inquiry. We are glad that, much as we differ from them on some important measures which are now before them, on this subject we are fully in accord with the Comitia of the Fellows of the Royal College of Physicians and the Council of the Royal College of Surgeons.

WITHIN the last few years trials for murder by poison have been alarmingly frequent. The uneasy feeling which this fact creates is intensified by several circumstances. One is that in nearly all these cases a conviction has followed, and the murderers have expiated their crime by death upon the scaffold; and yet in spite of this, murders by poison—the most detestable perhaps of all forms of murder—are still committed. Another characteristic of modern poisoners is their surprising audacity and recklessness, even in the face of the extreme probability of

their detection, conviction and execution. A third circumstance in connexion with these trials is that the poisons employed have been generally those the symptoms of death from which, as well as the pathological appearances, are well known, and which can be easily found by chemical examination. Thus arsenic and strychnine still continue to be used; two of the mineral acids have lately been used; and in only one recent case has a rarely used toxicant—that of aconitine—been employed; this last fact suggests mingled feelings. One is satisfaction that it is difficult, if not impossible, for criminals to obtain any of the deadly drugs not named in the preceding sentence, the detection of which might be more difficult. The other feeling is that of regret that so great facilities should still exist for obtaining such poisons as arsenic and strychnine, especially the latter; and that criminals should continue to nourish the belief that their use will escape the vigilance of the medical attendants. A brief glance at some of the details of these cases will make these remarks clearer, and show what means might be adopted to render criminal poisoning less easy of accomplishment, and more certain of detection.

To begin, then, with the case of LAMSON, tried in 1882 The case exhibited a mixture of cunning and recklessness. The former was shown by the manner in which the poison (aconitine) was purchased from a chemist to whom LAMSON was unknown, though it was sold to him as to a medical practitioner. It was observed at the time that it would have been perfectly legitimate for the chemist to have refused to sell such a poison even to a medical practitioner of whose identity he had no knowledge, and who might not have been one at all. Any practitioner requiring aconitine for a lawful purpose would have no difficulty in obtaining it from a chemist to whom he was well known, this fact being of itself a guarantee that the purchase was a *bonâ-fide* one. LAMSON'S utter recklessness was shown in the manner he administered the poison to his poor victim, his rapid flight, and the cool effrontery with which he returned and courted a full inquiry. Probably he hoped that so little known a poison as aconitine might fail of detection, but he reckoned wrongly. The symptoms were most carefully observed by the medical attendants, Drs. BERRY and LITTLE; while the chemical inspection by Drs. STEVENSON and DUPRÉ established the discovery of the poison by its well-known physiological properties to the complete satisfaction of the judge and jury, as well as of medical jurists.

Of poisonings by arsenic there have been several cases: one wholesale; the others, so far as is known, single cases. The first was that of the women FLANNIGAN and HIGGINS, tried in Liverpool in 1884. Though tried for the murder of THOMAS HIGGINS, three other cases were brought forward, and in all four the symptoms, post-mortem appearances, and chemical analyses were those of arsenical poisoning. Only traces of arsenic could be found in the liquid contents of a bottle and in a market pocket belonging to one of the prisoners. The proof that the poison had been obtained from fly-papers was due to the sagacity of Dr. CAMPBELL BROWN, who found that a solution of the fly-paper was identical with the liquid found in the bottle. But it is terrible to reflect that, as subsequently transpired before their execution, eleven persons in all had met their deaths at the hands of these women from the same poison. Crime appears to possess a fascination peculiarly its own to those who give themselves up to it, and criminal poisoning is no exception to this rule. In the same year occurred the case in Lincolnshire, where a woman prepared a rice pudding for her husband in which was a quantity of arsenic. The result was fatal, and the woman was committed for trial. As there was no proof of the possession of arsenic, the judge charged the grand jury in such terms that it was expected no bill would be found. But they did find a true bill, the case was tried, and the prisoner convicted and executed. The case of CROSS, the Cork poisoner, is so recent that it will suffice to notice a few points. The poison was probably obtained for a perfectly legitimate purpose, that of sheep washing. And while the case remains fresh in the memory of medical readers it may be well to point out one lesson to be learnt from this sad case. It is this: never to think too lightly of a case in which there has been excessive vomiting and purging without sufficient apparent cause to account for these symptoms. It is, no doubt, creditable to medical science to detect poison in the dead body. But it is far more creditable to it to detect the symptoms of poisoning during life, to save an unhappy victim from so dreadful a death, and to prevent would-be murderers from accomplishing their fell designs.

Strychnine has been used in several cases. There was the Ashton cases, in which a married woman succeeded in poisoning three persons before the true cause of the deaths was suspected. The deadly principle of the "mouse powder," which was the popular name of the poison used, was a mixture of arsenic and strychnine, which had somewhat masked the symptoms. Two bodies had to be exhumed, but the care with which the examinations were conducted by Dr. HARRIS of Manchester and the analyst of the county fully established the fact of poisoning by strychnine. The respectability of the woman's appearance and her previous character made it hard to believe that she had fallen a victim to such lust and cupidity as the evidence disclosed; and but for the firmness displayed by the learned judge (Mr. Justice CAVE), the jury would have disagreed, and there would have followed a great miscarriage of justice. In a case which occurred in one of the Welsh counties this same poison was employed. It was administered by the prisoner, a working man, to one of his fellow-workmen in a pot of porter, the motive being to avoid payment of a debt of some shillings! The poison was found in the liquid left in the vessel and in the deceased's stomach; the prisoner was convicted and executed. A third case occurred in one of the northern counties, the prisoner being a woman who had been cruelly deserted by her paramour, and in revenge administered "vermin killer" to his son, a little boy. The case was clearly proved; she was convicted and sentenced to death, but subsequently respited, probably on account of "extenuating circumstances." A fourth case was tried at Taunton, and ended in the acquittal of the accused. A remarkable feature of the case was that strychnine was the active principle of a new vermin killer, the colour of which was red—different from that of most of the vermin killers containing this poison, which are blue from the

indigo or ultramarine with which they are generally mixed. The fifth and last case of this series is the recently tried Camberley case, the details of which have been fully given in these columns. In this the sentence of death has been commuted by the Home Secretary, as was generally anticipated by those who had followed the case and felt convinced that several important links in the chain of circumstantial evidence were wanting. The case must for the present remain a mystery. As has been already observed in THE LANCET of January 28th, the surgeons, Messrs. TWORT and MANDERS, did all in their power to ensure a full inquiry, though it is to be regretted that Mr. TWORT did not secure the pill-box—which would probably have proved a valuable piece of evidence—and inform the police the same night. Had the latter been on the spot soon after the deaths of HANNAH and EDWARD BOWLES, important clues to the mystery might have been discovered.

Other cases remain for notice, but these we must reserve for another article.

SINCE the discovery of uric acid by SCHEELE in 1776, theories have assigned to this body a variable *rôle* in general pathology. At first it was regarded solely as a "concreting" acid formed in the kidney, which bound together the earthy matters of the urine to form a stone; hence its synonym, *lithic acid*, which is still frequently applied to it. The fact that gouty deposits also contained it led MURRAY FORBES, in 1798, to suppose that it was formed in the general fluids of the body, and not in the kidneys. The earlier views, up to the brilliant discovery of GARROD, who first detected uric acid in the blood of gouty patients in 1848, regarded the association of uric acid with gout as the result of physical rather than of chemical changes, and spoke of the formation of gouty tophi more as a consequence of insoluble material being deposited, than of a specific inflammation leading to increased formation, by chemical changes taking place in the tissues, either generally or locally. Even at the present day, evidence exists that this early view has considerable influence over the minds of some who are recognised as authorities on the subject. In fact, it is still possible to separate the teachers into two schools, the chemical and physical: the one holding that the chief relation of uric acid to gout depends upon an increased formation in the body; the other referring such relationship simply to the insolubility of uric acid and its tendency to deposit in parts of little vascularity under circumstances which retard its elimination or prevent its destruction. In England, the chemical school has the larger, if not the more influential following, owing, no doubt, to the advocacy of GARROD, MURCHISON, and LATHAM; on the Continent, however, the supporters of the physical theory are more numerous, and there is increasing evidence that their teaching is beginning to spread more widely in England. The latest addition to the teaching of the chemical school is that of Dr. LATHAM, whose Croonian Lectures of 1886 explained the whole *rôle* of uric acid so far as concerned its relationship to gout, rheumatism, and diabetes—that is, if the whole of his hypotheses can ultimately be sustained by facts. Indeed, so far as we can judge, he is probably correct in his assumption that uric acid is formed in the body as he describes—viz., by the conjugation of residues of glycocine with residues of urea. But we think he throws too much stress on the part played by the liver and kidney to be quite in accord with clinical experience. As is well known, he accounts for the presence of urate of sodium in the blood by the imperfect metabolism of glycocine. "Unchanged, it passes from the alimentary canal or elsewhere into the liver; there under the action of the gland it is conjugated with urea, and is converted into hydantoin; it then passes on to the kidneys, to be combined with other molecules of urea or bi-uret, forming ammonium urate, a portion of which overflows into the circulation, and is converted into sodium urate." Now, as a matter of fact, in frank gout at all events, the first appearance of the disease is not in the kidney but at the extremities, in the small joints, and it is not till repeated attacks have occurred that we usually have evidence that the kidneys are affected. Undoubtedly in some cases we have evidence that renal changes in the form of nephritis and lithiasis precede the arthritic inflammation, but these are commonly witnessed in the anomalous and irregular forms. In accepting Dr. LATHAM'S views, then, with regard to the formation of uric acid, we do so with the belief that the hypothesis should be made to include the possibility of the conjugation taking place in other organs and tissues besides the kidneys. Some writers have extended the *rôle* of uric acid beyond that of association of gout, rheumatism, and diabetes, and would attribute eczema to a rush of uric acid to the skin, headache to a rush of uric acid to the brain, and it has even been stated that urate of sodium has been found deposited on the valves of the heart. We are not aware of any well-authenticated observations that have proved, like those of GARROD in acute gout, the presence of uric acid in the blood of patients suffering from eczema or from megrim. In the absence of such proof we may be excused if we hesitate to believe that uric acid is necessarily concerned in their production. With regard to the skin, we have evidence of the excessive formation in some cases of lactic and butyric acids; and with regard to many forms of headache, the altered reaction of the urine points to some diminished alkalinity of the blood as a sufficient reason; whilst, with respect to the deposit of uric acid on the valves of the heart, evidence is conflicting. Those deposits that we have had the opportunity of examining have, on chemical investigation, proved to consist of crystals of cholestearin.

The physical theory of gout assigns to uric acid a far humbler *rôle* than the chemical. Without denying the possibility that in gout an excessive formation of uric acid occurs, it attributes the phenomena of the gouty seizure more to local influences, and may be thus briefly formulated. Supposing an anomalous formation (EBSTEIN), or an accumulation in the textures (especially the fibrous) brought about either in connexion with a tropho-neurosis, or, as some believe, by vital decay, some of the tissues of the body hold more uric acid than can be destroyed. In the more vascular parts this excess is washed away by the more rapid current, and appears in the blood; whilst in the least vascular, the cartilages of the joints, especially those more remote, the force of the blood current is too feeble to ensure removal, and consequently an attack of gouty inflammation ensues. With repeated attacks the system gets more and more saturated with the accumulated

uric acid, the larger joints become invaded, and the straight tubules of the kidneys blocked sooner or later with uratic deposit. There is much to be said in favour of this view. The facts that frank attacks of gout commence usually, unless determined to a larger joint by a sprain or other injury, in the most remote and smallest joints, and also that attacks are more frequent in limbs that have been injured or have had their activity impaired, as EBSTEIN has pointed out as of frequent occurrence in paralysed persons, the joints of the paralysed limb being always more deeply implicated than its fellow, go a long way to support the mechanical theory. Even in cases where the kidneys are affected before any arthritic outbreak occurs, the theory of stasis is sufficient to account for the phenomenon, since the deposition of the sodium urate does not occur in the proximal part of the tubule, which is the most vascular, but at the distal, which is the least. The determination of the attack to the kidneys and not to the small joints in some cases is accounted for by the physical theory, by some undue acidity of the urine causing deposition of urate in the tubule, and not to an increased conjugation of hydantoin and bi-uret in the vessels of the kidneys. Probably on this theory of stasis a more chemical one may be grafted, for it is very likely that diminished alkalinity of the fluids and tissues, such as is well known to occur in gout, is concerned in aiding the deposition of a substance so insoluble as sodium urate, though without the aid of some local stagnation it may be doubted whether that alone, as some writers have suggested, would be sufficient.

THERE are Provident Dispensaries and Provident Dispensaries. We have always been favourable to the application of the provident principle in regard to medical attendance on the strictly wage-earning class, and on such terms as were consistent with the dignity of the profession and the remuneration of the medical labourer. These conditions are absolutely essential. If they are not forthcoming, the Provident Dispensary system may be positively injurious to the profession and also to those whom it professes to benefit. To agree to attend a working man and his family, with a limited wage, at some future time, on condition that he will make a provident and periodical payment, of small amount in itself, but sufficient by multiplication to be remunerative, is an act of accommodation to the working classes on the part of a profession which has always been famous for its mercifulness. Those who are not rich must have medical men. Practically they have them on four different systems—either as paupers, as recipients of relief at some medical charity, as members of a provident dispensary, or as private patients. There are many working men who find it possible to pay their private medical adviser; and any working man who can afford to do so is very foolish to enter into any organisation, however perfect, which attends men and families wholesale. There is an advantage in the privacy of relations of a medical man with his patients which cannot be enjoyed by those who have to see him at a public institution and under public regulations. It is all nonsense to say that working men cannot pay a doctor. Thousands of them do so, and there are thousands of medical men willing to attend them on considerate terms. It only requires a little consideration of the nature of medical service and its value, and a little self-denial, to enable working men to meet the modest bills of those members of the profession who lay themselves out for practice amongst them. At the same time, there are thousands more to whom the provident principle is acceptable, and, if properly regulated, just. For more than twenty years this principle has been commended by leaders in the profession, who saw in it one of the best remedies, if not the only one, for abuse of the hospital system. It is perfectly obvious that there must be many working men, whose wages are small and whose families are large, to whom it must be an accommodation to pay a definite sum yearly. The profession would act contradictorily, and would put itself in an unfavourable light, if it did not recognise this. But the question has been prejudiced by the abuse of the provident principle. An instance of this is described in a letter which we publish to-day on the working of the provident system in Manchester, and which we find to be substantially borne out by the newspaper report of the annual meeting. Great things were expected of this Manchester experiment. But it has been eight years in existence, and now we find one of the leading dispensaries under the Manchester system dividing only £500 a year among five medical men, and in order to secure this amount of success resort has to be had to most undesirable methods. The wage limit has been abolished, and working men with family wages of several pounds a week, small tradesmen, and even lower middle class people are not ashamed to take advantage of a dispensary arrangement intended for people with thirty shillings a week and less; not only so, but children under fourteen years of age, one principal source of work and trouble to medical men, according to the newspaper report before us, are exempt from payment. What makes the experiment still more arduous to the medical officers is that members joining are, in an undue proportion, sickly and needful of medical attendance. The committee is formed largely of well-to-do persons, and they seem to be active canvassers for members, while the collector has a commission, and so the system is kept up. According to our correspondent the £500 a year is very unequally divided, and one unfortunate medical officer had to receive for six months' work the handsome sum of £3 17*s.* 6*d.* Such cases as this bring the provident principle into bad odour. We must insist that such a use of the provident system is quite at variance with reason and with the views of those who originated Provident Dispensaries. It will bring the whole system to grief and discredit if it is not abandoned. We have before us another report—that of the Bedford Provident Dispensary—which has been in existence for many years, and is in a fairly prosperous condition. Here there is a wages limit of 30*s.*, and members must be of the working classes. But here, too, the payment for children is unreasonably limited, so that no family is required to pay more than 3*d.* per week for parents and their children under fourteen years of age. A new Provident Dispensary has just been built there, entirely clear of debt. But even here only £557 was divided in 1886 among a staff of seven medical men. We make these remarks in no spirit of hostility to Provident Dispensaries; yet we must offer a clear intimation

that unless more care is taken to guard the too long overlooked interests of medical men, such institutions will not have the sympathy of the profession.

THE published report of the proceedings of the annual meeting of the Illinois State Board of Health gives some account of the action adopted in certain parts of the United States with regard both to maritime and land quarantine. The steamship *Alesia* arrived at New York on Sept. 23rd, 1887, having cases of cholera amongst her complement of 550 immigrants from Italy; and she was sent to the quarantine station at Hoffman Island for so-called observation. Dr. RANCH, secretary to the Illinois State Board being anxious to protect the district under his supervision, sought repeated information from the New York health officer, and from this we learn that there were eight cases in hospital on Sept. 24th, that by Oct. 10th twenty-six of the detained immigrants had contracted the disease, and that on the 19th another case occurred. "The quarantine system of the port of New York is now on trial," significantly added the New York health officer, and this apparently before the issue of the report of the committee appointed by the College of Physicians and Surgeons of Philadelphia, commenting severely on the condition of the New York quarantine station. As regards immigrants intending to enter the State of Illinois, an effort was made to prevent any person who had been detained at Hoffman Island from even travelling by rail unless provided with a certificate setting forth that he was not suffering from cholera or choleraic symptoms; but one company felt they could only act thus provided concerted measures were taken by all the companies in this direction. But much greater stringency than even this prolonged detention of the healthy together with the sick seems to be asked for by the Illinois Board, for on the arrival of 614 other immigrants from Palermo on board a vessel as to which the port medical officer states that there was "positively no evidence unfavourable" to her, the Illinois Board would, on the ground that she had come from a cholera-infected district in Italy, have had her detained for "observation during the necessary" incubation "period," and this although the journey from Palermo must have exceeded anything which the most stringent quarantinist has ventured to regard as a cholera-incubation period.

The attitude thus taken up by this inland State is altogether different from that adopted in this country; but it is held to be justified on the ground that the circumstances are in no way parallel, on account of the vast hordes of immigrants that are continually crossing the Atlantic, and this in vessels the officers of which cannot be relied on for trustworthy reports as to the occurrences of the voyage. And as to a certain number of infectious diseases, it is very truly held that the length of the voyage is just about long enough to increase the susceptibility to contagia brought on board by steerage passengers. It is also rightly maintained that whatever is done by way of prevention should be done at the expense of the nation as a whole, and not at the cost of those States which happen to contain the ports, or the great centres from which immigrants distribute themselves over the country at large.

The report admits that, although at New Orleans there is the most thorough and vigorous system of sanitary quarantine which has ever been enforced for the protection of a port, it will not suffice to exclude such a capricious disease as cholera, and it goes on to say that there is absolutely no safety for the United States so long as cholera exists anywhere on the continent of Europe unless vessels are immediately taken charge of by the quarantine authorities, cleansed and disinfected, and also subjected to a detention long enough to cover the recognised period of incubation after arrival. The remedy is heroic, judged of by proceedings taken in this country, and we doubt whether the States, as a whole, will ever agree to it; and this the more since during the long continuance of cholera in Europe in 1885-87, and under the present system, which is held to be insufficient, it is admitted that "as yet no cases of cholera" have developed "among or from immigrants allowed to land and travel into the interior" from the various vessels. Reading between the lines, we can well regard the extension of disease which took place at Hoffman Island in September and October last as largely brought about by those conditions under which the hitherto healthy people were compulsorily detained, and which were so "severely" commented on by the leading medical authorities of Philadelphia.

Annotations.

"Ne quid nimis."

ROYAL UNIVERSITY OF IRELAND.

THE following changes in the regulations for the medical examinations in the University have been fixed by the Senate, and only await the sanction of the Crown to be put into operation. 1. Students passing the examination now appointed for the M.B. degree will be entitled to receive the three primary degrees of M.B., B.Ch., and B.A.O. without any additional fee beyond what is already prescribed in the Calendar for admission to the M.B. degree. 2. Candidates may be admitted to the examinations for the higher medical degrees of M.D., M.Ch., and M.A.O. after the lapse of three academical years from the time of obtaining the primary medical degree. Provided always that every person who before the 1st day of January, 1888, had passed the examination for the degree of M.B. shall be entitled at any time during the three years then next ensuing to proceed to the degrees of M.Ch. and M.A.O., according to the courses and regulations in force in October, 1887. Provided also that all persons who in the year 1888 shall pass the examination for the primary medical degrees shall be entitled to proceed to the degrees of M.Ch. and M.A.O. at any shorter interval, upon passing the prescribed examinations. After next year certain additional certificates of hospital work will be required of candidates at medical examinations. The regulations regarding exhibitions, scholarships, &c., have also undergone modification, the nature of which will be published in due course.

THE BRITISH NURSES' ASSOCIATION.

WE are glad to know that the organisation of the British Nurses' Association may now be considered an accomplished fact. The key-note of the movement is that nursing is an essential factor in the modern treatment of disease. The number of highly educated gentlewomen now engaged in nursing has raised the social status of nurses immeasurably within the last decade. The founders of the new Association clearly saw that the time had come to unite nurses in the membership of a legally constituted profession. They also

knew that the control of this profession must be kept solely in the hands of medical men and nurses, and that it would be simply disastrous to allow nurses to be organised and controlled by any unprofessional and therefore irresponsible persons, a danger which certainly would have arisen but for the prompt action which has been taken. But the new Association utterly disclaims any antagonism to any other body. It merely claims for medical men and nurses the bare right to manage the nursing profession without the interference of any of the lay public, however well-intentioned. The Association therefore is fighting for the indisputable rights of the medical profession, and, as we have pointed out, deserves the support of every medical man who respects his calling. Meetings of leading medical men were called together to formulate the bye-laws. These have now been elaborated, and provide for the whole control of the nursing profession of the future being in the hands of a General Council, to be composed of an equal number of medical men, matrons of hospitals or infirmaries, and sisters or nurses. The Council will annually elect an Executive Committee containing twelve medical men among its members, the President of which will be H.R.H. Princess Christian. Membership of the Association will be open only to medical men, matrons of hospitals or infirmaries, and nurses who have been trained for three years. A general meeting is to be held on Feb. 13th, at 4 P.M., when Mr. Savory will take the chair. H.R.H. Princess Christian has announced her intention to be present, and we hear that leading members of the medical profession will attend and speak. We sincerely hope that many of our readers will make a point of being present and of joining the new Association at once, to show not only their interest in the welfare of nurses generally, but also their appreciation of the large share allotted to medical men in the organisation and government of the Association. We understand that any further information or tickets for the meeting can be obtained on application to the hon. secretary, 20, Upper Wimpole-street, W.

SUMMER HOMES FOR NURSING SISTERS IN INDIA.

WE are glad to learn from the Indian papers that Lady Roberts's philanthropic scheme for the establishment of summer homes for nursing sisters is making satisfactory progress. A house has been purchased at Murree, and is now being properly fitted and furnished, and at Kasauli one is being built. At both of these institutions sick quarters for officers are to be provided, an arrangement which cannot fail to be productive of great benefit to those for whom it is intended. The introduction of skilled European nurses into the hospitals in India is a movement which must commend itself to all who have friends in that country, and who take an interest in the welfare of those on whom devolve its government and its defence; but to send out nurses with the prospect of continuous work in hospitals in the plains would be an act of great inhumanity to them, and would to a large extent counteract the advantages expected from their services by the almost inevitable break-down in health from unintermitting residence and work in these malarious districts. If, therefore, we are to have efficient nursing, it seems imperative that provision should be made to relieve the nurses for a season from the cares and responsibility necessarily connected with their work, and to afford them an opportunity of regaining strength and energy when their health is beginning to suffer from long-continued exposure to heat and to the physical deterioration inseparable from hospital work. A considerable success, from a financial point of view, has attended Lady Roberts's labours, 53,000 rupees having been raised in India, and about £1600 in England; but this is much below what it ought to have been. It has enabled a commencement of the good work to be made in Bengal and the North-West Provinces, but the scheme should be extended to Madras, Bombay, and Burmah. We believe that the very moderate amount of help from England has been in a great measure a result of the non-appreciation of the necessity for these "homes of rest" and ignorance of the movement now for the first time undertaken to provide them. We cannot but think that if the imperative need of them, in the interests alike of the nurses and of our sick countrymen, in whose service their health is being sacrificed, were better known, there would be no scarcity of funds to provide all that may be deemed requisite. The establishment of sick quarters for officers at these summer homes, where they will receive that care and attention which are so invaluable to invalids, will furnish an additional claim upon those who have friends in India, and who will be naturally anxious to promote a scheme which promises to add so materially to the comfort and well-being of those in whose interest it has been organised. The working of such an institution will be attended with many difficulties, but we trust that, under the judicious management of a thoroughly practical committee and the superintendence of carefully selected matrons for each of the homes, these may be overcome, and an important element of success in the treatment of their cases may be secured to the medical officers of hospitals by the provision of efficient skilled nursing.

GERMAN MEASLES IN THE PORT OF PLYMOUTH.

OWING to the existence of four cases of German measles on board the Peninsular and Oriental steamer *Ravenna* on her arrival in Plymouth Sound on the 7th inst., the acting examining officer of Customs ordered the return of the steam tender, with officials on board, to Melbay until after an inspection by Dr. Fox, the port medical officer. When he visited the ship, he found two boys, sons of a British officer, and two Lascars suffering from the disease, and it is stated that a difficulty then arose as to dealing with them and the mother of the lads, because there was small-pox on board the port hospital ship. As a matter of fact, there is no power of removal in such cases except under a magistrate's order, and Dr. Fox, having telegraphed to the Local Government Board for instructions, received an answer authorising him to exercise his discretion under the circumstances of the case. In conformity with this view he allowed the vessel and all the passengers to proceed to Gravesend—a course which was obviously the right one, for the patients are stated to have been carefully isolated on board, and it is hardly likely that in these circumstances any magistrate would have ordered them into a small-pox hospital.

OVERHEAD WIRES.

THE educational action of circumstances has necessarily everything to do with the appreciation of danger and the development of a habit of caution. It is a natural consequence of our experience that we are always inclined to examine our surroundings and the ground on which we tread for it is in connexion with these that we may expect to find most of life's risks and troubles. How seldom do we look upwards unless it happen that some elemental disturbance forces us to respect our interests in that quarter. We are likely, however, to become ere long as careful of the state and contents of our upper atmosphere as of any other part of our environment. The possible means of injury acting from above have certainly increased as a direct consequence of recent scientific discoveries. A dozen years ago one had, indeed, a potent, though very rarely effective, source of danger in the overhead telegraph wires of our large cities. Now there are in some towns not only this but two other kindred powers at work in the telephone and the electric lighting com-

munications. The fact that these are not always for the public mere matters of convenience has been repeatedly demonstrated by such accidents as that which was lately reported from New York. In this instance a broken telephone wire, coming in contact with one charged with electricity for lighting purposes, became itself a conducting medium, and was wound in its fall round the fore-quarters of a passing horse, with, of course, fatal consequences. It is also said that the driver, in his ignorant endeavours to free the animal, was barely prevented from handling the fatal wire. This and similar accidents which have occurred from time to time, while they counsel, on the one hand, the most perfect insulation of the conducting wires, must also give weight to an argument in favour of the partly adopted and most rational practice of carrying the wires underground instead of over the housetops, as is now too much the rule.

NOTES ON THE RIVIERA.

AT the close of some articles on the Riviera written by a German physician in practice there, and published in the *Deutsche Medizinal Zeitung*, a complaint is made that there is seldom any correspondence between a Riviera medical man and a patient's family doctor, who has perhaps been treating him for years, and who necessarily knows all his idiosyncrasies, what drugs suit him, and what do not, &c. All this perhaps may have been communicated to the consultant under whose advice he has gone to the Riviera, but as a rule the medical man under whom he puts himself when he gets there has to begin *de novo* and find out all these matters for himself, greatly to the patient's disadvantage. Another matter on which the author touches is the difficulty and uncertainty of getting foreign prescriptions properly made up. A chemist in Genoa told him that about nine-tenths of the prescriptions which were brought to him by foreigners came from abroad. Those from Germany of course are in Latin, "a by no means familiar language to the Italian pharmacist" (!). Besides, as neither a German pharmacopœia nor a Latin-Italian dictionary is usually to be found, sad havoc must often be made of the intentions of the prescriber. There is, says the writer referred to, no official Italian pharmacopœia, and so, even when a prescription is written in Italian, the greatest care has to be taken to indicate exactly what preparations are meant. The pharmacopœias mostly in use seem to be that of Orosi (1876) and Dorvault's French *Officine*. There are also other Italian pharmacopœias, as those of Sardinia (1853) and the Papal States (1869), and the old Austro-Italian one. In one chemist's shop in Genoa he found nine Italian pharmacopœias (most of them imperfect), two English, and two French ones. There is no proper control over the pharmacies, and therefore old and useless drugs may be sold; still, he says, it is quite possible to obtain as good drugs in the Riviera as elsewhere.

POLYMORPHOUS ERYTHEMA.

THE pathogeny of many erythemata is ill-understood. These areas of hyperæmia occur under a great variety of conditions, but their connexion with rheumatism is not the least interesting. Rayer considered that polymorphous erythema was a form of rheumatic fever with cutaneous instead of arthritic manifestations. Haushalter regards multiform erythema as an eruptive fever, having, like the acute specifics, an eruptive period, a period of incubation, and visceral manifestations such as bronchitis, endocarditis, and nephritis. Search has been made, without success, by Haushalter for a micro-organism in these cases, but cultivations in agar-agar gave rise to white colonies, which, however, suspended in distilled water and injected into guinea-pigs, gave no result.

REGISTRATION BILL.

A WELL and influentially attended meeting on behalf of the sanitary registration of public and semi-public buildings was held last Saturday at the Society of Arts, Sir Joseph Fayrer in the chair, when resolutions were passed in favour of this measure. The subject has been repeatedly discussed in our columns, and we have felt the need for more precautions than are now taken to ensure that the drainage of houses should be constructed so as to meet the requirements of health before they are occupied as dwellings. We have, however, feared that the licensing of a large number of persons as proposed in the Bill for the purposes of granting certificates as to the condition of houses was an unsafe procedure, and that the possession of such certificate would be calculated in some instances to give rise to a false sense of security, and to obstruct an active local authority in utilising the powers conferred upon them by statute. The remedy for faulty construction of house drainage lies, we believe, in the improvement of the administration of local government.

GERMAN MEDICAL CONGRESS AT WIESBADEN.

THE seventh annual Medical Congress will take place at Wiesbaden from the 9th to the 12th of April, Professor Leube of Würzburg being the president. The following subjects will be discussed: Chronic Diseases of the Heart Wall and their Treatment, to be opened by Professor Oertel (Münich) and Professor Lichtheim (Berne); Alcohol as a Remedy, by Professor Binz (Berne) and Dr. von Jaksch (Graz); Prevention and Treatment of Asiatic Cholera, by Professor Cantani (Naples) and Dr. A. Pfeiffer (Wiesbaden). Amongst the papers already promised are: Dr. Rumpf (Bonn) on Floating Heart (*Wanderherz*); Dr. Unverricht (Jena), Experimental Researches on the Mechanism of Respiration; Dr. Adamkiewicz (Cracow) on Combined Degeneration of the Spinal Cord; Dr. Jarworski (Cracow), Experimental Contributions to the Dietetics of Digestive Disorders; Dr. Stiller (Buda-Pesth) on the Treatment of Basedow's Disease and on the Diagnosis of Renal Tumours; Dr. Ernst Pfeiffer (Wiesbaden), Excretion and Solution of Uric Acid; Dr Binswanger (Jena) on the Pathogenesis of the Epileptic Fit; Dr. Jürgensen (Tübingen) on Cryptogenetic Septico-pyæmia.

PUBLIC HEALTH OF INDIA.

A PAPER was recently read to the Society of Arts by Mr. Justice Cunningham on "The Public Health of India." Our readers may remember the active part taken by Mr. Justice Cunningham in 1884 to promote the sanitary improvement of Calcutta. In the paper now read he called attention to the very great importance of the subject, referring as it does to a population of 200,000,000, spread over an area of 881,000 miles, "with local variations of climate, rainfall, soil, national habits, and character, as pronounced as any to be found among the European States." In 1885 there were above 5,000,000 deaths registered in British India, or 26 per 1000 of the population, and there is every reason to suppose this is considerably under the actual number; "above 78 per cent. of the entire registered mortality was due to mitigable or preventable diseases." Fevers were the cause of nearly three millions and a half of the deaths, amounting in some districts to a mortality of from 35 to 42 per 1000; and cholera gave rise to 395,928 deaths. That much may be done to reduce the death-rate is sufficiently shown by the decrease effected in that of the army, which from an average of 65, in the period before the Crimean War, has been brought down to 14½ per 1000. An equally striking result has been obtained in the gaols, the mortality in them being not more than a third of that which formerly existed; and the reduction in the death-rate of

Calcutta, consequent upon an improved water supply and other sanitary measures, still further confirms this opinion, Mr. Justice Cunningham appears to have strong doubts of the possibility of safely entrusting municipalities in India with the control of the health arrangements, from the want of a leisured class, with sufficient education, intelligence, activity, independence, and business habits, to carry out efficiently the necessary measures. Supervision is urgently needed. "What was desired was such a commission at the headquarters of each Presidency as would convert the sanitary supervision of the country into a reality." He also noticed the great amount of venereal disease in Calcutta, and the disastrous results of recent home legislation on the subject. "As regarded contagious diseases, 14,000 sufferers were treated in the public medical institution of Calcutta in 1885, and 4000 of these were of a form that became constitutionally hereditary. There was good reason to fear that the disease was gaining ground in the country, assuming yearly more alarming proportions and a more intense character." He referred to the remarkable experience there was in India, which showed the degree to which this disease was amenable to control and might be got rid of by effectual supervision, and protested against a disease which had been practically extirpated being deliberately revived, in obedience, not to any local complaint, but to the sentiment of a certain class of agitators, male and female, in England.

SPASMUS NUTANS IN DENTITION.

DR. E. TORDENS' out-patient class in Brussels has been afforded the opportunity of seeing a case of spasmus nutans, or *tic de salaam*. This is not a very common affection, but several examples are mentioned by Henoch in his Lectures on Children's Diseases. The Brussels case was that of a little girl of ten months, still at the breast. She had been very healthy, and was fairly robust. A month previously to her admission the mother had noticed a slight but nearly constant nodding motion of the head. When examined for the first time the chief motion was rotatory; the eyes also rolled from side to side, especially when the head was held. There were two teeth. The child was treated with oxide of zinc and bromide of potassium. The next time the patient was brought, a fortnight later, but little improvement could be detected, and a nodding motion was added to the lateral oscillation. Afterwards, however, improvement commenced, and at the end of six weeks from the first visit the child was quite well. By that time she had cut two new teeth. There could be little doubt that the affection was a complication, though a rare one, of dentition.

A LION-TAMER'S ADVENTURE.

THE spirit of morbid curiosity and love of sensation, though it adds but little to the truly recreative value of amusement, has never lacked its representatives among the sight-seeing public. Occasionally, however, it meets with a somewhat sharp rebuke, which we may hope is not devoid of a certain corrective influence. The accident which a few days ago befell a "lady lion-tamer" in Dublin may serve as a suitable illustration. In this case an attempt was being made to photograph a lioness with the head of the tamer in her mouth, when the animal, wearied by the tension of her maxillary muscles, or scared, it may be, by the sudden flash of the magnesian light, tore the woman's cheek completely open with a sudden closure of her jaws. Fortunately, no more serious injury resulted, the lioness being beaten off in time to prevent a threatened catastrophe. That such exhibitions possess a considerable degree of interest for many of those who witness them is unquestionable. Whether they serve any really satisfactory purpose apart from the profits they bring to the performers is at least open to question. We learn nothing from the conduct of the tired and frightened animal which might not have been predicted with nearly absolute certainty. We see in the action of the lion-tamer an exhibition of will-force in which courage passes into foolhardiness, and we are bound to regret that this wasted energy was not applied to some more useful purpose. As regards the on-lookers, it is merely the appetite for the horrible which is baited by these exhibitions, which, though they do not tend to humanise the beast, at least do something to brutalise mankind.

THE VETERINARY AND MEDICAL SCIENCES.

THE President of the Yorkshire Veterinary Medical Society in a recent inaugural address drew attention to the rising status of veterinary surgeons, and, referring to the condition of agricultural holdings and stables, in so far as public interests were concerned, he expressed a hope that the time would soon come when veterinary officers of health would be appointed. He evidently objects to the practice under which medical officers of health and inspectors of nuisances are allowed to condemn carcases as unhealthy, especially such officers as have had no practical or even theoretical knowledge as to the optical appearances of morbid or healthy tissues in our domestic animals. Under the qualifying condition he names we are in entire agreement with him; but we would remind him that much that is known as to the pathology and etiology of the diseases of the lower animals, as they affect man by way of food or otherwise, has been the result of the labours of officers of health and other medical men under whom the inspectors work; and that even at the present juncture, when such questions as the development of scarlatina from a bovine disease, or the relation of bovine to human tuberculosis, have arisen, it has been members of the medical profession who have taken the initiative in studying and discussing the subject. There is nothing we should value more than the co-operation of veterinarians skilled in the pathology and etiology of disease.

MANAGEMENT OF CHILDREN'S TEETH.

PROFESSOR MILLER of Berlin, in an article on the Milk Teeth, published in the *Therapeutische Monatsschrift* (No. 2, 1888), points out the evil effects of sugar and other substances which undergo fermentation changes. A child, he says, is constantly eating sugar and substances containing it, and though the particles of food are more apt to get between the teeth and to set up caries than in the case of grown persons, children never, or at least rarely, have their teeth cleaned. This is a process which he would insist upon, a very soft brush and a weak disinfecting dentifrice being employed for the purpose. He would have it done twice daily. Sweetmeats should, he thinks, be entirely prohibited, or their use very carefully supervised. Barley-sugar he does not consider so injurious as chocolate and soft clammy sweets, for whereas these latter will break up and particles of them may remain for hours between the teeth, such a substance as barley-sugar is readily soluble, and therefore it is soon carried away into the stomach with the saliva. It must be remembered, too, that starchy substances soon become converted into grape sugar. Prof. Miller suggests that after a child has eaten the barley-sugar allowed him its mouth should be washed out with water. When the teeth have become decayed they should at once be stopped, even in the case of children under three years of age. All children's teeth should be, he considers, regularly attended to from the very beginning. We fully concur with the recommendation of Dr. Miller that children's teeth ought to be cleaned, and that the fermentation of sugar is a potent exciting cause of caries, but

we dissent from him as regards the prohibition entirely of sweetmeats. Sugar is a part of the natural food of children; there is a universal craving for sweets amongst the juveniles of all nationalities, and the percentage of those having a distaste is almost infinitesimal. If sweets are to be denied, to follow the argument to its logical conclusion, fruit ought to be prohibited, because it has been shown by Magitot, Tomes, and others that citric and malic acid are quite as destructive to teeth as sugar fermentation.

THE REV. DR. DALLINGER ON SMALL-POX.

DR. DALLINGER, speaking with the double authority of a minister of religion and a man of science, has been saying a few words of good sound sense to Yorkshire people about the mockery of prayer to God for the abatement of small-pox, without the diligent use of all human means to this end. There cannot be a case of small-pox in a community without blame attaching either to the patient or to those responsible either as parents or as guardians of the public health. It is averred that men and women half recovered from the disease in Sheffield have been going about in public vehicles or to places of amusement. This is an outrageous breach equally of sanitary law and of the Scriptural law of consideration for others. Small-pox is a disease from which everyone may be absolutely protected by vaccination and revaccination, so that to have it is almost a crime. We have no right to ask the Almighty to do that which is perfectly within our own power.

THE ESTABLISHMENT OF THE LESSER CIRCULATION.

THE time when the lesser circulation is established is usually considered to be the moment of birth. Some microscopical investigations which have recently been published by Dr. Zaleski in the *Przeglad Lekarski* (No. 1, 1888), which were carried out on the lungs of fœtal animals in various stages of development, show that not only the bronchial arterial system but that of the pulmonary artery is filled with blood-corpuscles long before birth, so that the conclusion is forced upon us that the lesser circulation is established and in active operation during intra-uterine life, though, of course, it is not nearly so much developed as it becomes after birth.

FIRES AND THEIR CAUSES.

THE report just issued by the Chief Officer of the Metropolitan Fire Brigade contains a mass of interesting matter, but nothing is of greater significance than the record which it contains of fires in the course of twelve months past which have been manifestly due to sheer and inexcusable carelessness. A list of 1672 fires classified under their causes contains the following surprising entries: "Candle, 141; children playing with fire, 28; children playing with lucifers, 50; defect in flue, 90; goods coming in contact with gaslight, 15; curtains and blinds coming in contact with gaslight, 18; seeking an escape of gas with light, 19; light thrown down, 231; light thrown from street, 7; smoking tobacco, 20; total, 599." That is to say, nearly two-fifths of the whole number have been caused by the most reckless stupidity. What, for example, can be a more unpardonable act of heedlessness than the incautious throwing away of a flaming light in a place where it may possibly do mischief? Yet this act is by far the most mischievous of all the causes enumerated. Among the causes of fire in which our readers will find a peculiar interest is "fumigating," which during 1887 was responsible for five conflagrations. It is much to be feared that this very necessary work is often undertaken with a singular lack of necessary skill and appliances. True it is that a very moderate degree of skill only is required, and very simple appliances are quite sufficient. But in this very fact lurks a danger. Everybody feels competent to the task, and clumsy methods of making a bonfire charged with sulphur upon an imperfectly protected floor enjoy, we fear, a very undue popularity.

BOARDING-HOUSES FOR INFECTIOUS CASES.

THE subjects of infectious disease, no less than of illness which is not communicable, require during convalescence the advantages conferred by a change of air. The difficulty experienced by many in securing this boon is, however, enhanced in such cases by the sanitary necessity which excludes them even during the progress of recovery from most convalescent establishments. They are thus obliged to seek for such accommodation as they can find in apartments at the seaside or elsewhere, and are liable not only to suffer themselves from unforeseen accidents of their new condition, but they may conceivably become the actual sources of danger to healthy persons dwelling under the same roof. This latter point has of late been strongly insisted on in connexion with a suggestion that special boarding-houses should be established for the reception of this class of patients. The project is certainly a good one, and the argument in its favour, as we have said, is not an illusory one. It is one, however, which may be pressed too far. We do not deny that occasionally infected persons are allowed to leave home before all chance of their becoming the active foci of disease has passed away. Still we would also remember that the termination of the infectious period can, as a rule, be defined with a fair approach to accuracy, and that the possible transmission of disease in this way is well within the control of a careful practitioner. Every improvement in existing methods of sanitation is most acceptable, and as one such we welcome the proposed extension of the convalescent home system; but, at the same time, we regard it merely as a means of doubly assuring the work of disinfection which should be completed in the sick room.

FEVER IN LONDON.

THE only district in London from which a case of small-pox was removed last week to the Metropolitan Asylums Board hospitals was St. Pancras, the case occurring in the same street as that in which the disease had already appeared. The number of admissions of persons suffering from scarlet fever during the week ending Feb. 3rd was 104, that of enteric fever 14. London is still free from typhus fever, and the year is now too far advanced for any special prevalence of this disease to occur.

PSEUDO-HYDROPHOBIA.

THE extraordinary account of the members of a family living near Carrickallen, county Leitrim, being attacked with hydrophobia, in consequence, it is alleged, of partaking of the flesh of a pig supposed to have been rabid, has met, as it deserved, with but little credence. To be sure, a clerical gentleman residing in the neighbourhood was not only convinced that the cases were true hydrophobia, but also that they were cured by a potion prepared by one Magauran, who has a local reputation for such cures by this remedy, the secret of which he will not disclose. In reading the reverend gentleman's lengthy account, contributed to the *Globe* of the 2nd inst., one could not help wondering whether, after all, there may not exist in our day people as credulous as those who two centuries and a half ago were impressed by the virtues of Sir Kenelm Digby's famous recipe. Credulity apart, the interest of this record lies in the nature of the affection that attacked father,

son, and daughters. The account referred to shows on the face of it that the attack was certainly not hydrophobic, and that its nature may be more readily understood by considering the great part which imagination and imitation often play in the production of paroxysmal nerve affections, as illustrated in Hecker's Epidemics of the Middle Ages. Nearer to our day and more to the point are the records of cases of "pseudo-hydrophobia" such as that given by Dr. Broadbent five years ago (Clin. Soc. Trans., vol. xvi), who took occasion to point out to how great a degree the higher emotional centres may operate in exciting into action the lower centres; how, in fact, real disease may be simulated closely by functional disturbance, as in hysteria.

THE PARKES MEMORIAL PRIZE.

IT may be useful to remind our naval and military readers that the triennial Parkes Memorial Prize of one hundred pounds in money, and a gold medal value fifteen guineas, is to be awarded at the close of the present year. The competition for the prize is open to all medical officers of the Army, Navy, and Indian Services of executive rank. The subject, as previously announced, is the "Etiology of Yellow Fever, to be illustrated, as far as practicable, from the personal experience of the writer"; and the essays, each bearing a motto, and accompanied by a sealed envelope with the same motto and containing the name of the competitor, are to be sent to the Secretary of the Parkes Memorial Fund, Royal Victoria Hospital, Netley, on or before Dec. 31st, 1888.

THE LATE PROFESSOR DE BARY.

IN the lamented death, on the 19th ult., of Prof. de Bary, of the University of Strassburg, at the age of fifty-seven, the botanical world loses one of its most illustrious members. Prof. de Bary is perhaps best known for his researches in mycology and the lowest forms of vegetable life. His "Lectures on Bacteria," of which a translation by Mr. Garnsey, edited by Prof. J. B. Balfour, has recently been issued by the Clarendon Press, Oxford, supplied a much-felt want. Prof. de Bary was born at Frankfort; he first studied medicine, but in 1854 became a teacher of botany at Tübingen. After holding professorships at Freiburg and Halle, he was in 1872 appointed to the chair at Strassburg.

AUDITORY ALLOCHIRIA.

ALLOCHIRIA, first described by Obermeister in 1882, consists in the perception of a sensation in the opposite side of the body to that on which the excitation was made. Tabes dorsalis and other spinal diseases afford the most frequent examples of it. M. Gellé has observed in a young person affected with chronic hyperplastic otitis and auditory hyperæsthesia of the left side, but not presenting any sign of paralysis, hysteria, or tabes, an auditory allochiria, consisting in the fact that the patient heard on the left side a piping sound produced in the right carotid artery under the influence of the least effort or of the slightest emotion!

THE SALFORD INFECTIOUS HOSPITAL.

THE proposal to provide a new infectious hospital for Salford is meeting with considerable opposition on the ground of the unsuitability of the intended site, and protests have been made against it, both in the public press and by means of a deputation to the Local Government Board. The whole subject will probably be thoroughly threshed out at a public inquiry, and in the meantime we would only express our gratification that some hospital provision other than that now existing in the borough is in contemplation for Salford.

THE CROWN PRINCE.

THE recent rumours and reports as to the condition of the Crown Prince of Germany have been conflicting, but the telegram from San Remo received by us on Thursday announces, we deeply regret to state, that the breathing of the distinguished patient is not nearly so good, and that relief by means of a surgical procedure will very soon be necessary. From all the information at present available, it would appear that the larynx is the seat of perichondritis with necrosis of cartilage; but that fact does not materially modify the grave prognosis given some time ago. Should the perichondritis prove to be the sole disease, its great extent must cause serious permanent deformity of the larynx, with corresponding impairment of its function. On the other hand, the steadily progressive nature of the perichondritis—its spread from one side to the other, and from cricoid to thyroid—offers strong grounds for the fear that it is but a secondary result of a more grave malady. Tracheotomy in itself, in an adult, is an extremely simple operation, devoid of all the difficulties surrounding it in young children, and the gravity of it is solely derived from the conditions rendering its performance necessary. But the recent development of the case will excite renewed anxiety for the Crown Prince, and we shall anxiously await further news of the distinguished patient.

Just on going to press we learn that the operation of tracheotomy has been successfully performed on His Imperial Highness by Dr. Bramann, the other medical attendants being present.

LAPAROTOMY FOR INTESTINAL OBSTRUCTION DUE TO GALL-STONE.

WE learn that Mr. Charles Stonham has recently performed laparotomy in a case of intestinal obstruction, and found a gall-stone firmly impacted in the ileum, about twenty inches above the ileo-cæcal valve. The stone was removed by a longitudinal incision about one inch in length, and the wound closed with a double row of fine silk sutures. There was recent peritonitis of the gut above the stone, but none below. The patient, a lady aged sixty-six, who was very prostrate at the time of the operation, died fifteen hours later. Symptoms of obstruction had lasted forty-eight hours.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign eminent medical and scientific men are announced:—Dr. Hyacinthe Sauveur, Emeritus Professor in the University of Liége, and last survivor of the old Faculty of Medicine reorganised in 1835.—Dr. Shaitanoff, Medical Inspector of Yaroslarls.

FEES FOR COMPULSORY NOTIFICATION.

THE Sanitary Committee of the Oldham Corporation have had a lengthened discussion on the question of payment for certificates for the compulsory notification of infectious diseases; the point in dispute being whether the fee for a single certificate should cover notification of all cases in the house or not, and whether it should also be made to include an opinion as to the fitness of the patient for removal. The difficulty of certifying as to multiple cases is often as great when they are in one house as when they are in separate ones, and this especially where houses are tenanted by more than one family; and it is certain that the fee decided on in the Act did not comprehend the inclusion of information as to other matters than the notification of disease. By some members of the committee the increased demands were regarded as unjustifiable, and it is quite certain that the medical profession will be within their rights if they decline

to become advisers of the Corporation as to anything beyond what the Act of Parliament requires. The suggestion that such additional advice should be made gratuitously would hardly have been ventured if any other profession than the medical had been in question.

HUMAN ELECTRICITY.

A HEMIANÆSTHETIC hysterical female was shown at a recent meeting of the Société de Biologie, from whom M. Féré could under certain circumstances disengage at the surface of the body luminous tufts, one centimetre long. The son of this woman, likewise hysterical, presented the same peculiarity. In both the skin was remarkably dry. These phenomena could be easily augmented by provoking sensorial excitations. Such phenomena are known more commonly in certain hot and dry tropical climates.

FOREIGN UNIVERSITY INTELLIGENCE.

Königsberg.—Professor Christian Luerssen, of the Forestry Academy of Eberswalde, has been appointed to the chair of Botany.

Paris.—The chair of Comparative and Experimental Pathology is officially declared vacant.

Parma.—Dr. A. Riva has been appointed Professor of Clinical Medicine.

Pisa.—Dr. A. Fubini, Extraordinary Professor of Physiology in Palermo, has been nominated to the Professorship of Materia Medica and Experimental Pathology.

Salamanca.—Dr. Don Gabriel Alonso Nieto has been elected Professor of the Diseases of Children; and Dr. Don José Estéban Sanchez, Professor of Clinical Medicine.

Strassburg.—Dr. Naunyn, the newly appointed Professor of Medicine, will commence his duties on April 1st. For the chair of Medicine at the University of Strassburg, vacant by the appointment of Professor Naunyn at Königsberg, the names are mentioned of Professor Strümpell (Erlangen), Quincke (Kiel), and Lichtheim (Berne).

Tours.—Dr. Ledouble has been appointed Professor of Anatomy, in place of M. Giraudet, deceased.

Tübingen.—Dr. Garré of Basle has been appointed Professor at Tübingen.

Zurich.—Dr. F. Frankenhäuser, Professor of Midwifery and Gynæcology, is retiring. His place will be taken by Dr. Wyder, *privat docent* in Berlin, who had just been nominated for the corresponding chair in Dorpat, which will, of course, now have to be filled by a fresh appointment.

WE regret to announce the fatal termination of an accident which happened on the 7th inst. to Mr. E. Mortimore Smith, a surgeon practising in Southport. Mr. Smith slipped at Formby Station on the evening of the day in question, and fell between a moving train and the platform, sustaining a fracture of the thigh and severe crushing of the knee. He was at once removed to Southport Infirmary, where he arrived in a state of collapse. On the 8th inst. his thigh was amputated by Mr. Arthur Jones, assisted by Messrs. McNicoll, Baines, and Johnson, the latter being the uncle of the patient. In spite, however, of every attention, Mr. Smith failed to rally, and death terminated his sufferings at an early hour on the following (Thursday) morning. Mr. Smith commenced practice in Southport some two years ago, removing there from Leeds, where he formerly resided.

THE Italian troops at the seat of war in Abyssinia are suffering from fever and intestinal affections, due, it is said, to the continued rainfall, succeeded by sudden elevations of temperature. Of the 18,000 men composing the expeditionary force about 1000 are in hospital. The death-rate, however, is still very low.

AT Assab, on the Red Sea, a severe outbreak of small-pox has been raging among the indigenous inhabitants. Out of 150 Abyssinian prisoners sent there from the Italian advance posts only twenty survive; fever, too, of a very pernicious type prevails in the offing and on the land. This is ascribed to the prolonged low ebb, which leaves exposed to the sun extensive sandy spaces from which myriads of dead fish and insects exhale a miasma. The Italians employed the black population to cover part of these spaces with earth, but the mortality among the labourers was such that they had to desist. Epizootic disease, moreover, has broken out among the cattle, the horses, and the camels quartered at Assab.

THE Sanitary Council of Constantinople have, on receipt of reports from the Ottoman consuls at Bari and Naples, established a five days' observation on arrivals from Bari. Whether this means a fresh appearance of cholera at Bari, which has so repeatedly suffered during the past two years, it is difficult to say, for the Ottoman authorities are always ready with their quarantine restrictions. The action was taken notwithstanding the protest of the Italian delegate, who, being overruled, quitted the Council.

WE regret to see the announcement of the death of Mrs. Oliver Wendell Holmes, wife of the well-known American writer.

Pharmacology and Therapeutics.

STROPHANTHUS.

FRAENKEL, GUTTMANN, and LANGGAARD have recently given the result of their experience with strophanthus. Fraenkel believes that it modifies blood pressure and causes diuresis, diminishes dyspnœa, and is a genuine cardiac drug. He has employed it in twelve cases of valvular disease, two of arterio-sclerosis and hypertrophy of the left ventricle, three of simple cardiac weakness, and three of chronic nephritis. Four of the first set were relieved by the administration thrice daily of from five to fifteen drops of the tincture; the others were not benefited. The second and fourth groups were not benefited, but the third was greatly relieved. Guttmann has tried it in forty cases; fifteen were valvular diseases, five fatty myocarditis; the others were nephritis, emphysema, hepatic cirrhosis, and pleural effusion. He maintains that it cannot compare either as a heart drug or as a diuretic with digitalis, but it is of some value in relieving shortness of breath. He prefers the alcoholic tincture of the seeds diluted five times with water, and from 80 to 190 drops of this given every day. Langgaard does not compare strophanthine with digitaline, and thinks it of no value for modifying blood pressure, though it does increase, in his experience, the energy of the cardiac contractions. Csatary prefers the tincture to the infusion, and finds it valuable, in from five to ten drop doses, in causing œdema to disappear and in relieving dyspnœa. The rise in blood pressure and the diminution of the pulse-rate he observed to occur half an hour after administering the drug, and these effects lasted from one to three days after the discontinuance of the drug. The diuresis was found to be simply in proportion to the rise in blood pressure, and strophanthus has no action on the kidney itself. Csatary has also observed a daily loss of body weight amounting to one kilogramme, which he attributes to a loss of water by sweating and by diuresis, and at the same time to a diminished formation of heat. He has noted painful diarrhœa and headache as the only ill effects of strophanthus. In Graves's disease Zerner noted but a temporary diminution in the frequency of the pulse-rate.

BORIC ACID.

Boric acid is not caustic, and its toxicity is but slight. M. Gaucher has experimented with it by feeding guinea-pigs, weighing 300 grammes, to the extent of fifty centigrammes a day; the animals have only succumbed after from eleven to fourteen days. A daily dose of seventy-

five grammes, would, other things being equal, be required to poison an adult male. As a topical application boric acid is of use in impetigo, whose infectious and contagious nature is no longer contestable. Colourless and odourless, it is better than the disagreeable and staining oil of cade. After removing the scabs by poulticing, Gaucher employs an ointment made of three grammes of boric acid and thirty of glycerole of starch. Of 103 cases of impetigo a cure was effected in from eight to fifteen days. But dilute white precipitate ointment is equally, if not more, successful. Gaucher states that he has cured a case of cutaneous tuberculosis with the same borated pomade. He has given from half to one gramme doses a day in cases of advanced phthisis, with the effect of diminishing the fetor and lessening the tenacity of the sputa, without deranging the stomach or intestines. Boric acid is easily and rapidly eliminated by the urine, and has proved of service, given internally in gramme doses, in cases of cystitis complicating hypertrophy of the prostate. It is better than borate of soda, because not astringent.

ADONIS ÆSTIVALIS.

Albertoni has further investigated the physiological action of this common and widely spread Italian plant. It slows the pulse, regulates it, raises a lowered blood pressure, and increases the urinary secretion. It is said to be tolerated better than digitalis, and may be given at all stages of heart disease; but it is most useful in dropsy and for a diuretic action. Bufalini praises it in the treatment of aortic disease, and he has prescribed it in renal disease and pleuritic effusion. The whole of the dried plant is used, from four to twelve grammes being made into an infusion with 200 grammes of warm water, and allowed to stand for some hours. Teaspoonful doses may be taken frequently, and the effects watched. It must be given at least three or four days before the therapeutic effects are observed, but its administration may be continued for months without untoward results from its own actions.

LACTIC ACID IN DIARRHŒA.

M. Hayem writes again in the *Bulletins et Mémoires de la Société des Hôpitaux de Paris* on the value of lactic acid in diarrhœa, especially when the stools are green, from a chromogenic bacillus, and acid in reaction. He now recommends larger doses: twenty teaspoonfuls of a 2 per cent. solution may be given in the twenty-four hours. The solution is prepared from eighty grammes of water, twenty of sugar, and two of pure lactic acid. In certain forms of chronic diarrhœa in the adult he has also found the medicament of value, if given in doses of two or three dessert-spoonfuls half an hour or an hour after meals. Cantani has given as much as four grammes of lactic acid a day in diabetes.

OXYGEN AND NITROUS OXIDE.

Dr. Witzniger of Vienna has employed in human beings a mixture of eighty-eight parts of nitrous oxide with twelve parts of oxygen as an anæsthetic. Care is taken to prevent access of atmospheric air during the production of narcosis. The mixture can be administered for ten minutes and more. Severe surgical operations were well borne. This method of anæsthetising is known as Paul Bert's; and it is a coincidence that M. Claude Martin of Lyons should have just made a communication on the same subject to the Academy of Sciences of his incomplete experiments made on animals.

METROPOLITAN POLICE SURGEONS' ASSOCIATION.

A SPECIAL general meeting of the above Association was held on Thursday, Feb. 9th, to consider the desirability of appointing a deputation to wait upon the Home Secretary with reference to several important matters affecting the medical service of the police, when a correspondence of which the following is an abstract was read. On Dec. 31st the hon. secretaries of the Association wrote to the Chief Surgeon (Mr. MacKellar), asking him to obtain an authoritative explanation of some words in a recent order of Sir Charles Warren's which seemed to bear hardly upon divisional surgeons, and at the same time reminding him that a code of rules and regulations affecting the duties and rates of pay of divisional surgeons was urgently needed, and complaining of the great delay which constantly takes place in the payment of divisional surgeons' salaries. To this Mr. MacKellar replied on Jan. 25th that he had submitted the above three points to Sir Charles Warren, and that the Commissioner, in reply, desired him to state that, though he could not officially deal with or recognise the Police Surgeons' Association, yet if the same series of questions were submitted to him through the Chief Surgeon by any divisional surgeon in his individual capacity, Sir Charles Warren would give them full consideration.

This reply having been discussed by the Council of the Association, it was decided to call the present meeting, in order that a deputation might be appointed to wait on the Home Secretary. The proposed deputation was, however, rendered unnecessary by the fact that a satisfactory statement in reference to the matter had been made by the Chief Surgeon.

It was stated that the Association might as well dissolve if Sir Charles Warren's dictum were to be accepted, and that the experience of years had shown the inutility of divisional surgeons complaining individually of any police order, however arbitrary.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Crickhowell Rural Sanitary District.—Mr. Philip E. Hill recently brought under the notice of his sanitary authority an outbreak of scarlet fever which occurred under circumstances that are discreditable to sanitary administration. In one small room a boy had died of scarlet fever and a woman was confined, she and her infant remaining there, whilst her husband and another child were also sick of scarlet fever. There is no hospital for the district, and hence efficient isolation cannot be carried out either in the interests of the public or of the sick. The disease appears to have been contracted from an inn where a previous case had occurred, and where, notwithstanding warning, the sick child had been allowed to associate with persons visiting the inn. How far this could be included under the condition of wilful exposure necessary to successful legal proceedings it is difficult to say, for the clause on this subject is so worded as to defeat many proceedings that ought to be possible under it; and it is stated in the report that the circumstances did not bring the case within the section of the Public Health Act dealing with inns. But there is no reason why some small hospital building should not in the future be ready to receive infected persons, so that a recurrence of such conditions shall be impossible.

Isle of Wight Rural District.—It is known that Dr. Groves has no easy task in this rural district, which is somewhat proverbial for its tardiness in sanitary work; but this can hardly explain the issue of a report for 1886, nearly a year too late to be of immediate service. The general death-rate was 15·7 per 1000, or, if foreign deaths are excluded, 14·0 per 1000, and the zymotic rate was 1·13. Of the deaths forming this group there were 14 from diphtheria. Niton is one of the places that was affected, and it is characterised by soak wells and leaky cesspits with a stream contaminated almost to its source. The disease and ill-defined sore throats prevailed also in other places. Thus at Freshwater there were some forty cases between September and December; and of the sanitary state of some of the districts affected Dr. Groves simply says that it had so frequently been brought under the notice of the authority that there was no need to enlarge upon it. Six deaths of enteric fever were all attributable to drinking impure water. At Whitwell there has fortunately been a commencement of works for providing an independent water supply. So, also, bye-laws were sanctioned as to Freshwater; but the sanitary authority, disregarding the advice of their medical officer of health, provided in them for the discharge of sewage matter into the subsoil, the result being that the bye-laws were disallowed. In the matter of certificates under the Public Health Water Act, it appears that on more than one occasion the authority have requested the inspectors of nuisances to furnish the favourable report necessary to the granting of the needed certificates, when the medical officer of health has been unable to sanction such a step and Dr. Groves

very properly protests against action such as this, and maintains that the overriding of his opinions cannot conduce to efficient sanitary administration. Apart from this, Dr. Groves records his opinion that the work of the sanitary inspectors, though unsystematic, is of great value; but he has urged again and again that this sort of work is not alone that which is needed in the sanitary interests of the district. The rural district of the Isle of Wight will never be in a satisfactory state until the people who elect the sanitary authority find that visitors decline to come and spend their money where such ill-conditional things prevail; and lest persons should in ignorance run the risk which this involves, we should advise all persons intending to seek a health resort in this district to make inquiry in advance.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5739 births and 3945 deaths were registered during the week ending February 4th. The annual rate of mortality in these towns, which had declined in the preceding four weeks from 23·8 to 22·5 per 1000, further fell last week to 21·9. During the first five weeks of the current quarter the death-rate in these towns averaged 22·9 per 1000, and was 1·8 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 13·4 in Bradford, 17·0 in Birmingham, 17·9 in Bolton, and 18·1 in Hull. The rates in the other towns ranged upwards to 25·9 in Blackburn, 27·3 in Manchester, 31·8 in Preston, and 32·2 in Plymouth. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 481 and 478 in the previous two weeks, rose last week to 506; they included 248 from whooping-cough, 75 from scarlet fever, 52 from "fever" (principally enteric), 42 from diphtheria, 35 from measles, 35 from diarrhœa, and 19 from small-pox. These zymotic diseases caused the lowest death-rates last week in Newcastle-upon-Tyne and Cardiff, and the highest rates in Blackburn, Sheffield, and Derby. The greatest mortality from whooping-cough occurred in Brighton, Salford, Bristol, London, and Leicester; from scarlet fever in Manchester, Oldham, Huddersfield, and Blackburn; from measles in Birmingham and Derby; and from "fever" in Nottingham and Derby. The 42 deaths from diphtheria in the twenty-eight towns included 29 in London, 3 in Birmingham, and 3 in Manchester. Small-pox caused 17 deaths in Sheffield, 1 in Bristol, and 1 in Leeds, but not one in any of the twenty-four other large provincial towns. The Metropolitan Asylum hospitals contained only 7 small-pox patients on Saturday last, against 9 at the end of the previous week. The number of scarlet fever patients in the Metropolitan Asylum hospitals and in the London Fever Hospital was 1650 at the end of last week, against numbers steadily declining in the preceding eight weeks from 2764 to 1741; the 112 cases admitted to these hospitals were fewer than in any recent week. The deaths referred to diseases of the respiratory organs in London, which had been 591 and 534 in the preceding two weeks, further declined last week to 516, and were 125 below the corrected average. The causes of 73, or 1·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Blackburn, and in five other smaller towns; the largest proportions of uncertified deaths were registered in Oldham, Sunderland, and Salford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined in the preceding four weeks from 27·1 to 22·4 per 1000, was again 22·4 in the week ending Feb. 4th; this rate exceeded, however, by 0·5 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 16·1 and 16·2 in Leith and Greenock, to 22·4 in Perth and 26·1 in Glasgow. The 566 deaths in the eight towns showed a further decline of 1 from the numbers in recent weeks, and included 25 which were referred to whooping-cough, 12 to scarlet fever, 12 to diphtheria, 9 to diarrhœa, 9 to measles, 2 to "fever" (typhus, enteric, or indefinite), and not one to small-pox; in all, 69 deaths resulted from these principal zymotic diseases, against numbers declining from 91 to 65 in the preceding four weeks. These 69 deaths were equal to an annual rate of 2·7 per 1000, which was 0·1 below the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined from 30 to 22 in the preceding four weeks, rose again last week to 25, of which 17 occurred in Glasgow. The 12 deaths from scarlet fever showed a considerable increase upon recent weekly numbers, and included 6 in Glasgow, 2 in Dundee, and 2 in Perth. The deaths referred to diphtheria also showed an increase; 6 were returned in Glasgow, 3 in Greenock, and 2 in Perth. The fatal cases of measles, however, which had been 26, 15, and 10 in the previous three weeks, further declined last week to 9, and included 6 in Edinburgh and 2 in Leith. The 2 deaths from "fever" occurred in Glasgow and Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had declined in the preceding five weeks from 184 to 138, rose again last week to 142, and exceeded by 16 the number returned in the corresponding week of last year. The causes of 74, or rather more than 13 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 31·9 and 33·1 per 1000 in the preceding two weeks, declined to 29·9 in the week ending February 4th. During the first five weeks of the current quarter the death-rate in the city averaged 33·9 per 1000, the mean rate during the same period being 23·2 in London and 24·4 in Edinburgh. The 202 deaths in Dublin last week showed a decline of 22 from the number returned in the previous week; they included 10 which were referred to whooping-cough, 6 to scarlet fever, 4 to "fever" (typhus, enteric, or simple), 3 to diarrhœa, and 2 to measles. Thus the deaths from these principal zymotic diseases, which had been 29 and 33 in the preceding two weeks, declined last week to 25, and were equal to an annual rate of 3·7 per 1000, the rate from the same diseases being 3·7 in London and 2·4 in Edinburgh. The 10 deaths from whooping-cough exceeded the number in any recent week, while the 6 deaths from scarlet fever showed a decline of 4 from the number in the previous week. The deaths referred to "fever," diarrhœa, and measles corresponded with the numbers in the previous week. The deaths of infants exceeded the number returned in any previous week of this year, whilst those of elderly persons showed a considerable further decline from recent weekly numbers. Two deaths from violence, but no inquest cases, were registered in the city; and 61, or nearly a third, of the deaths occurred in public institutions. The causes of 27, or 13 per cent., of the deaths in the city were not registered.

THE SERVICES.

Surgeon-Major J. E. V. Fross has been appointed to the medical staff of the Bombay British Forces from the 7th inst.

Surgeon-General James Mouat, V.C., C.B., half-pay, has been appointed Honorary Surgeon to the Queen, vice Deputy Inspector-General E. Bradford, half-pay, deceased (dated Feb. 8th, 1888).

Surgeon-General W. Marshall-Webb has been appointed Principal Medical Officer at Aldershot, in the room of Surgeon-General Fox.

An order has been issued at Aldershot directing medical officers in charge of women and children to report any case of scarlet fever, small-pox, cholera, measles, diphtheria, or any infectious disease. These reports will be transmitted by the Principal Medical Officer to the Assistant Quartermaster-General for the information of the General Officer Commanding. The Assistant Quartermaster-General will also report if it is deemed necessary to close any of the schools of the division, or take any other disciplinary action.

ADMIRALTY.—The following appointments have been made:—Surgeon George D. Trevor Roper, to the *Stork*; Surgeon Frederick J. Burns, to the *Jackal* (both dated Feb. 14th, 1888); Surgeon Robert H. Nicholson, to Plymouth Division of the Royal Marines; Surgeon George F. Wales, to the *Cambridge*.

MILITIA MEDICAL STAFF.—Surgeon-Major P. Lavery, 3rd Battalion, Princess Victoria's (Royal Irish Fusiliers),

resigns his commission; also is permitted to retain his rank and to wear the prescribed uniform on his retirement (dated Feb. 4th, 1888).

ARTILLERY VOLUNTEERS. — 1st Volunteer (Norfolk) Brigade, Eastern Division, Royal Artillery: Richard Blaney Wrightson, M.D., to be Acting Surgeon (dated Feb. 4th, 1888).

RIFLE VOLUNTEERS.—1st Dumbartonshire: The undermentioned Acting Surgeons resign their appointments:—J. F. Murison, M.B., and A. Martin, M.B. (both dated Feb. 4th, 1888).—3rd (Dundee Highland) Volunteer Battalion, the Black Watch (Royal Highlanders): Surgeon P. Young resigns his commission (dated Feb. 4th, 1888).

Correspondence.

"Audi alteram partem."

ROYAL COLLEGE OF PHYSICIANS.

To the Editors of THE LANCET.

SIRS,—The profession owes a debt of gratitude to the Censors' Board of the College of Physicians for the action recently taken by that body, which received the support of a large number of Fellows at the last Comitia. In referring to the subject, I am not, of course, going to lift the veil of secrecy which is imposed by an effete bye-law wholly out of tune with present-day ideas, but I cannot refrain from expressing my own opinions upon a matter of vital importance to the honour and dignity of a calling which is in such danger of being degraded through wilful resort to the arts of the tradesman, or a sublime indifference to the higher motives, and a culpable laxity in declining to condemn the adoption of such arts by others. Individually there is not a Fellow of the College who, if asked the plain question whether advertising for the sake of personal profit were a legitimate mode of aiding one's advancement in the profession, would not hold up his hands in horror at the bare idea of such a thing. I fear that we sadly want to "clear our minds of cant" in this matter. We live in an advertising age, and at no time has the love of notoriety been greater. All the more reason, then, for circumspection, and a clear understanding of the distinction between what is legitimate and right and what is inadmissible and even culpable. Such resolutions as that passed last week touch but one point, but they must do some good by awakening in the callous the sense of what is unbecoming in conduct on the part of those who should value personal honour above public notoriety.

With respect to a difficulty which seems to beset so many minds—viz., where to draw the line,—it is easy, of course, to leave the decision to each individual concerned, in the belief that if right-minded he will not trangress, and will hold his peace if he does. This is all very well and proper, but it shows a lack of knowledge of the circumstances in which we live. It is as absurd as it is wrong to place in the same category elementary instruction in physiology and hygiene with that of so-called "domestic medicine" and the popular advocacy of some special line of treatment. The line cannot be drawn precisely, and there is no doubt a down grade from the highly legitimate, nay desirable, position of the one, to the handbill or circular that places the professional man on a level with the lowest quack. So that to a certain extent it is not possible to arbitrarily define the limits of popular medical writing, and it must be left to the individual conscience of what is right. If, then, one actuated by the best of motives do unwittingly transgress, he should be made to feel that he has sinned against a recognised moral code, but not be held up to condemnation. Let him depart in peace and sin no more. Far different should our treatment be of those who for the sake of gain pursue these advertising arts. I do not hesitate to say that they should be scouted by the whole profession until they amend their ways. But the whole subject was so fully and boldly treated by the physician who gave the Introductory Lecture at University College last October that I need not develop it here. Suffice it to say that personally I thoroughly endorse his views.

Holding these opinions, I may perhaps be pardoned if I subscribe myself, Yours faithfully,

Feb. 7th, 1888. A JUNIOR FELLOW.

REFORM AT THE ROYAL COLLEGE OF SURGEONS.

To the Editors of THE LANCET.

SIRS,—The first thought that must strike any reader of the manifesto of the President of the Royal College of Surgeons, which is likely for many reasons to become a historical document, can be none other than one of deep regret. Not only is it an illustration of the time-worn saw *Parturiunt montes*, but it does no credit to an ancient corporation such as this that, even in the defence of an untenable position, such a lamentable gathering of ill-assorted arguments should be marshaled. The battalion might well have been collected from the *anthropophagi;* for the reasoning employed is of such a nature that one proposition devours its neighbour. We are unfeignedly sorry to reflect how little such a reply as this will add to the reputation of the College, for it does not need a man of the legal acumen of Lord Cranbrook to spy out at once the inconsistency of this remarkable fulmination. The "reply" is nominally directed to the statement of the Association of Fellows; but as it deals as much with the claims of the Members as with those of the former body, we beg your indulgence for a few remarks thereon. We should trespass too much upon your space did we deal with each clause *seriatim*, and therefore must single out one or two of the more glaring defects.

The very first statement contains a misstatement, for it numbers the Members at 18,000, though both Mr. Holmes and Dr. Danford Thomas informed the Council at the last general meeting of the results of our scrutiny of the "list of Members." Under 12,000 was the number we arrived at after most careful search through the last Medical Register. Surely the Council might have instructed the College secretary to verify or disprove our assertion, before making public so incorrect a computation! The petition of the Members had been signed by 4665 Members, and that, of course, was a much smaller proportion of 18,000 than of 12,000. The Council states that there was "no evidence before the Council that the majority of even the Members themselves are in favour of the claims set up on their behalf." Has the Council ever sought for such evidence? No; yet it has been abundantly supplied to it, not only when it was informed on Nov. 3rd, 1887, of the number of signatures, and that in *many large towns* from two-thirds to three-quarters of the Members living there had actually signed; not only in the ridiculous number of dissentient Members (fourteen) who had recorded their disapprobation of the petition, but also in the enormous majorities in favour of the resolutions passed at the College at successive general meetings. Is this evidence? If not, why did not the Council poll its own Members? The Members would not have grudged the expense involved—considerably under £100. As to its poll of the Fellows, the disingenuity of that you have long ago exposed. Yet the Council, which treats so lightly a matter of nearly 5000 signatures, plumes itself upon a document signed by the magnificent total of "over six hundred," and on a majority of six out of eighteen in the first, thinly attended and badly advertised, of the series of general meetings. It is careful also to include two propositions in one sentence, and to make its lame answer to *one only* do duty for a judgment on both. This is a very poor feint. It has been maintained ere this on behalf of the Council that it would be unfair to deprive the Fellows of the electoral value for the extra money defrayed by them upon an extended course of professional study; but now the Council tries to make a point out of the present possibilities of obtaining the Fellowship "without any further special curriculum of professional study involving additional expense." One clause objects to Members of twenty years' standing being eligible to the Council on the ground that it would substitute mere seniority for professional distinction. There is no question of *substitution*, for the proportion of seats asked for by the Members is small, and they may be trusted to take care that they elect men of "professional distinction," for such are not unknown among the ranks of the general practitioners. The time limit may also be looked upon as a self-denying ordinance on the part of the Members.

We are not at present so directly interested as the Fellows are in the question of the election of the President; but may point out that clauses *c*, *d*, *e*, and *f* are mutually antagonistic in their bearings, and that clause *f*, where the

Council speaks of the danger of placing the election of the President in the hands of "a comparatively small number," is an instance of the Council being judged out of its own mouth, not only on this but on the larger question of the Members' claims. We are informed, however, on the highest authority, that the Privy Council does not look so slightingly as does the College President upon the petition presented by 4665 Members of the Royal College of Surgeons, and that that body looks upon it as a most important and weighty document, over the discussion of which much time must yet be spent. We have no misgivings as to the result, and remain your obedient servants,

Feb. 8th, 1888. WARWICK C. STEELE, WM. ASHTON ELLIS, } Hon. Secs. Assoc. M.R.C.S.

IMMEDIATE CLOSURE OF TRACHEAL WOUNDS.

To the Editors of THE LANCET.

SIRS,—As confirming Sir W. Mac Cormac's letter, and supporting your editorial remark on the advantage of immediate closure by suture of tracheal wounds, the following case may be of interest.

A. B ——, aged fifty-seven, a man suffering from extensive cancer of the tongue implicating the floor of the mouth, and being beyond any surgical interference, was on Jan. 1st, 1888, seized with violent hæmorrhage from the left lingual artery. Owing to the condition of the parts it was found to be impossible to secure the bleeding points, and all styptic application failed to arrest the hæmorrhage. It was decided, owing to extensive glandular mischief making the ligature of the external carotid artery a very difficult operation, to tie the common carotid. All went well until I had placed the ligature round the artery, when the patient ceased breathing, and although every effort was made to drag the diseased tongue forward, it was found impossible to restore respiration. So without loss of time I opened the trachea and introduced a tracheotomy tube. The patient rapidly commenced to breathe again, and I finished the operation. The patient having now recovered somewhat from the anæsthetic, I removed the tube and found he breathed quite easily by the natural way. I therefore stitched up the wound in his trachea, placed a few strands of horsehair in the external wound for drainage, and returned the patient to bed. He made a perfect recovery from the operation, the wound healing by first intention, and he had no further difficulty in breathing.

This case was instructive in many ways, and I venture to think that in extensive operations about the mouth a preliminary tracheotomy or laryngotomy might be well performed, enabling the pharynx to be packed with sponges, so as to prevent the possibility of the blood being swallowed or trickling into the trachea. After the operation the tracheal wound might be at once closed, and in this manner cold air is shut off from the lungs, and the extra risk to the patient by the performance of the tracheotomy reduced to *nil*. I am, Sirs, yours faithfully,

Upper Wimpole-street, Feb. 7th, 1888. F. BOWREMAN JESSETT.

MANCHESTER AND SALFORD PROVIDENT DISPENSARIES.

To the Editors of THE LANCET.

SIRS,—As the Provident Dispensary system is engaging the attention of some well-meaning members of the profession, I beg to enclose the annual report of the Pendleton Provident Dispensary, which is the most flourishing branch of the above Association. Members over fourteen years of age pay a subscription of one penny a week. "Children under fourteen years of age, in one family, are charged one penny a week for the first two; *all the remainder are admitted free.*" One penny is charged for each prescription, and the profit made last year upon 40,386 prescriptions is stated to be £68. The sum of £499 was divided among the medical staff, and as they paid 11,322 visits and had 9492 consultations at the dispensary, making a total of 20,814 visits and consultations, their remuneration did not amount to sixpence for each visit and consultation. The medical men receive one-half of the weekly subscription and two-thirds of the profits over, after paying all other expenses. When this dispensary was started, a rule was made that all persons with an income of over thirty shillings a week were ineligible as members, but it was found that the poorer classes did not care to join the dispensary in sufficient numbers, so the rule was abolished, and now there is no limitation as to the income of those wishing to become members; consequently members of well-to-do families with an income of several pounds a week, small shopkeepers, and lower middle-class persons have taken advantage of this method of obtaining medical attendance. The acting committee, which is composed of paying members, encourage every person they can to join the dispensary, where medicine can be had for one penny a bottle. The Pendleton Provident Dispensary is almost entirely in the hands of one medical man, who keeps two qualified assistants to do the work. Another of the medical staff made 160 visits during the past six months, besides attending twice a week at the dispensary, and he received £3 17*s.* 6*d.* as his share of the receipts. The collector, who also acts as dispenser, canvasses for members, and receives a commission for those he persuades to join the dispensary. This comparatively new departure in the practice of medicine does not tend to raise the profession in the estimation of the public, and unfortunately the clergy and those persons who delight to pose as philanthropists (though not at their own expense) are ardent supporters of this Provident Dispensary scheme.

I am, Sirs, your obedient servant,

Feb. 4th, 1888. M.D.

"ANTISEPSIS IN PHTHISIS."

To the Editors of THE LANCET.

SIRS,—I am glad to see this question raised in THE LANCET both by your able leader and the letter of Dr. R. J. Lee. I quite agree with him that the inhalation to be of any benefit must be kept boiling. But are we not, in using these vapours, going against the climatic theory of treatment of phthisis? We are told that a moist atmosphere is the hotbed for causing and rearing the bacillus. What is the vapour? Steam qualified by some antiseptic? Yes, but does or will the said qualification do the good we want and wish for? I have tried, unfortunately on myself, almost every known antiseptic; had them boiling in water over a portable gas tripod until the room reeked with the odour; but I very much doubt if the antiseptic good was greater than the discomfort of the heat and moisture. Lately I am using as a dry inhalation what my friend Dr. Wm. Henry White of Weymouth-street gave me, the carbolised iodine thymol ether and spirit, and find it very soothing, but how much gets as far as the apices I cannot say. Since then I got a box of the iodine disinfecting candles, and I think this opens a ready and easy way of introducing into a patient's lungs any antiseptic in a dry atmosphere, and is worthy of a trial on a larger scale. Trusting you will give us some further information of this very important point,

I am, Sirs, yours faithfully,

Ashburton, Devon, Jan. 29th, 1888. WILLIAM FRASER, M.B.

THE DRAINAGE OF CANNES.

(From our Special Correspondent.)

Cannes, Dec. 1887.

DURING the last eight years it has been acknowledged on all sides that Cannes requires a general system of drainage. No one now denies that such sewers as actually exist give off bad odours, that the cesspools are a nuisance and a danger, and that Cannes is so growing in wealth and population as to call for the prompt abolition of all primitive and barbaric methods of dealing with sewage. The difficulty, as is the case in so many other towns, does not arise from the indifference of the population to the need of reform. Nor, again, is the necessary outlay considered a formidable obstacle. On the contrary, the funds are ready at hand. Householders are actually compelled to pay four francs per cubic metre for emptying their cesspools, and various police ordinances, together with the increased use of water, necessitate the repetition of this unpleasant and expensive operation at frequent intervals. The cost for a private house or villa varies from £3 to £10 a year; while large hotels sometimes spend as much as £40 and even £60 a year merely for the emptying of their cesspools. The population would, therefore, be no poorer if each proprietor were

called upon to pay a tax or a subscription representing an equivalent sum, so as to be allowed to drain direct into the sewer. The night carts remove from forty to fifty cubic metres of soil every evening. This means an income of £2000 to £3000 a year, or a capital, at 5 per cent., of £40,000 to £60,000. Such is the capital or the income which might be obtained without in any wise increasing the expenses actually incurred by the householders of Cannes, if cesspools were abolished and a general system of drainage introduced in their stead.

Cannes is also well favoured as regards water supply. The canal of La Siagne, which commences at St. Cezaire, could give 80,000 cubic metres per day. A comparatively small outlay would suffice to raise the amount to 140,000 cubic metres, but actually only 25,000 cubic metres are received. Nevertheless, this is equal to 1250 litres per day per inhabitant, if we estimate the population at 20,000. Perhaps, however, this is scarcely a fair estimate, for though the census taken on May 31st, 1886, showed that there were 19,959 persons then residing at Cannes, this is just the time of year when visitors have left the town. The authorities themselves state that the foreign population amounts to 8000 persons. Further, of the 25,000 cubic metres of water 10,000 are lost in rivulets that run through the town, and 5000 are reserved for washing the streets and for public fountains. Yet with all these deductions there still remain 500 litres per day per head for domestic use, and for sanitary purposes 25 gallons, or 112 litres, are generally considered sufficient. In any case, as already mentioned, the water supply can be readily, largely, and economically increased.

Cannes, it will be seen, is in a favoured position for sanitary improvement, in effecting which no obstacle would be found in public opinion. The inhabitants of Cannes possess at once the will, the water, and the money required to carry out a general scheme of drainage. Even the earthquake has not shaken their favourable position. The shock was certainly felt at Cannes, but it must have been much less severe than in many other parts of the Riviera. At that time 120 houses were in course of demolition. These were old rickety dwellings in the Poussiat district which had been condemned as unfit for habitation; yet, though in a most unsafe condition and half pulled down, none of these houses fell during the shock. In any case the people on the Riviera seemed to consider Cannes a safe place, for an immense number of fugitives came from all sides and remained for the rest of the winter there. The town had never been so full before. The municipal receipts augmented instead of falling off; so that the earthquake, far from preventing the realisation of sanitary reforms, has, if anything, facilitated these projects. It seems strange that during eight years nothing has been done, though the means of action were forthcoming and the necessity was unanimously acknowledged.

The real difficulty arose from the multiplicity of counsels. At first the matter seemed easy to decide. There was the example of numerous English and American towns where excellent results are recorded. It is true that, as a great part of Cannes is built on the sea shore, and on a level with the Mediterranean, there is a lack of fall, and a large quantity of sand gets into the sewer; but this obstacle, it was thought, might be overcome by extra pumping stations to lift the sewage. Sir Douglas Galton was therefore invited to report on the subject, and the French engineers, M. Bruniquel and M. Durand Claye, were also consulted. Without entering into minute details, it may be stated generally that the conclusion derived from all these reports and investigations pointed to the necessity of a separate and small canalisation. M. Hourlier, the architect of the town, strongly advocated this solution of the problem, and has drawn up an elaborate project based on this principle. Cannes must have large sewers to receive the sudden and semi-tropical down-pour of rain usual in this climate. Men must be able to enter these sewers so as to clear away the great accumulations of sand blown in from the sea, and of earth brought down from the mountains. No foul water whatever can be allowed to descend into underground canals thus encumbered, and where the fall in the principal sewer, and on a length of 1200 metres, is only equal to 0·0015 per metre. But within these sewers, suspended at the side or laid at the bottom, small pipes of iron or glazed hardware could be placed to receive the sewage proper. While the rain water might go to the sea at the nearest and most convenient outfall, the sewage would travel to a pumping station, where it would be raised to a higher level and propelled through closed pipes to a point some miles away from the town.

A few years ago it seemed as if a scheme of this description would really be carried out; but, on referring the whole question to Paris, endless complications arose. Men of the highest scientific eminence loudly condemned any such proposal, and a scheme for draining Cannes according to the Berlier system was brought forward. The Paris Municipal Council had sent a technical commission to visit the sewers of London, and the result of this expedition was anything but favourable to the English system. The Society of Public Medicine and Professional Hygiene, which takes the lead in all matters of sanitary reform, voted by a small majority against M. Durand Claye and the advocates of the English methods of water carriage and drainage by gravitation. Basing their theories on the discoveries of M. Pasteur, both Dr. Brouardel and Dr. Proust condemned those English methods which in France are called the "*tout à l'égout*." The argument, briefly, is that, though sewers may be made self-cleansing and inodorous, practically it can rarely be said that they possess either of these qualities. Also it is possible, by the careful use of traps, disconnecting chambers, and the full ventilation of soil pipes, to thoroughly protect a house from the ingress of sewer air; but, as a matter of daily experience, few houses are thus efficiently dealt with, and the continued outcry raised throughout England against sewer air is a proof that both sewers and house drains too often fail to work satisfactorily. Finally—and this is the reasoning which carries the greatest weight in France,—the fact that a sewer and a drain are self-cleansing and perfectly inodorous does not suffice to prove them free from danger. At Lyons, for instance, Dr. Tessier inoculated some guinea-pigs with some of the contents of the foulest cesspool, and they in no wise suffered from the operation. He then took some water out of a sewer that received the drainage from the Hôpital de la Charité. It was so clear, so free from odour, that if placed in a decanter a person ignoring its true character would not hesitate to take it for drinking water. Yet the guinea-pigs which were inoculated with this apparently clean water died at once. Hence the adversaries of the *tout à l'égout* maintain that it is the specific germ and not the smell which causes the danger. They disapprove of all systems of drainage which place the house or the street in connexion with sewers that may receive dejections from a patient suffering from some contagious disorder. They approve of pneumatic drainage because the pipes must be hermetically closed and cannot be ventilated. The Liernur system as applied at Amsterdam, and the very important improvements realised in Paris by M. Berlier, both act by pneumatic suction and draw off the sewage, without placing it in communication with the outer air, and without allowing one house to be contaminated by its connexion with sewers that receive the dejecta from other houses.

While distracted by the cross-fire of these rival schools—the administration of the Ponts et Chaussées and M. Durant Claye on one side, and MM. Pasteur and Brouardel on the other—the municipality of Cannes was still further perplexed by the appearance of yet a third candidate in the field. Mr. Isaac Shone, while repudiating pneumatic suction, came forward to advocate pneumatic propulsion. While ignoring the arguments of Dr. Brouardel, he nevertheless inferred that the proposals of M. Durand Claye and the *tout-à-l'égout* school were impracticable. In a learned exposition of hydraulic science, he showed that the topography of Cannes rendered unassisted drainage by gravitation impossible. Mr. Shone therefore proposed to secure the necessary fall for drainage by gravitation by placing at short intervals his pneumatic ejectors, which would automatically raise to a higher level the sewage they receive. But, so far as the theoretic contention raging in France is concerned, the Shone system may be considered as a half-way house between the *tout à l'égout* and pneumatic drainage. The ordinary English method of water carriage is applied till the sewage reaches one of the Shone ejectors; then the sewage is lifted to a higher level, thrown into an iron pipe, and there all connexion with the outer air ceases. Thus the Shone system isolates each district that supplies each ejector from other districts that supply other ejectors. But, till the ejector is reached, all the objections raised against English water-carriage drainage apply against the Shone system. With the Berlier and the Liernur systems, the absolute isolation commences at the base of each soil pipe in each house.

They are therefore preferred by the adversaries of the English practice of water carriage, while the Shone process is too near an approach to pneumatic drainage to be cordially supported by the opposite school. For the moment, therefore, Mr. Shone, in spite of the very practical character of his proposals and the learned arguments on which they are based, is likely to slip between two stools. In fact, his proposals when referred to M. Durand Claye by the municipal authorities were somewhat carelessly condemned on the ground that there was clockwork machinery in the ejectors, and that the health of a town could not be exposed to the risk of a complicated apparatus getting out of order. M. Durand Claye, it may be remembered, brought forward the same arguments at the Vienna International Congress of Hygiene, but was met by so many facts and figures refuting this assertion that he had to withdraw from the position he had taken up, and acknowledge that in certain localities the Shone system might render considerable service.

In the meanwhile the municipality of Cannes, tired out by all these controversies, have fallen back on their original project. This has now been worked out in all its details. Small sewers are to be placed in big sewers, and will have their outfall in a large reservoir built somewhere near the Town Hall. From this point a steam engine will raise the sewage and pump it out some miles away from the town, where it may be used for irrigation purposes or allowed to escape in the sea. In the month of May the municipal elections will take place, and the preparation and adoption of this project will be the main claim brought forward by the municipality to secure its re-election. If they are successful and return to power, then the project, I was assured, will at once be put into execution. There is no doubt that any of the proposed systems would be a great improvement on the present state of affairs. It is in every sense regrettable that theoretical discussion should have for so long delayed indispensable and practicable reform. Eventually it may be demonstrated that something better might have been done, but it will be impossible to gainsay that a great good was achieved and many lives saved. Cannes cannot afford to wait till all theorists shall have come to mutual agreement. There is imperative necessity for immediate action. If perfection cannot be attained, improvement is certain, and the municipality must be congratulated on having come to this practical conclusion. The result of the municipal elections in May will be awaited with impatience and anxiety by all who are interested in the welfare of this most fashionable winter health resort.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE ROYAL INFIRMARY.

SEVERAL of our medical charities have held their annual meetings since my last notes, and I now give you some condensed account of their statements. The report of the Newcastle Royal Infirmary is hopeful. The out-patient department has been remodelled. It now consists of those who have been discharged as in-patients, and who still require medical attendance. The casual treatment is now restricted to those who require immediate attention from the nature or urgency of their affections. In consequence of these changes, the treatment of special cases—such as diseases of women, diseases of the skin, and of the throat and ears—among out-patients has now ceased. It is right to say, however, that this city possesses many institutions for the treatment of these cases, where the diligent student may acquire a fair knowledge of the various diseases treated therein. It is right to say that the dental department, owing to its special utility, has been continued. The same may be said of the eye department. Injuries to the eye are very frequent in the manufactories on the Tyne, and the services of the surgeon who attends this class of cases are largely called upon and greatly valued. The whole number of cases received during the year has been 3020; in the previous year it was 3175, showing a decrease of 155. The result of the changes in the constitution of the infirmary as regards admission of patients is mostly shown by the financial statement, that for the past year the whole expenditure has been £11,941, and the whole income £10,118. This is a saving as regards expenditure of £1700, the excess of which in 1886 was over £4000. The President, the Earl of Ravensworth, in his remarks, alluding to the great saving shown in spirituous liquors during the year, said: "If he were a doctor, and he thought his patient wanted keeping up, he would order him whisky or brandy, although it tormented the feelings of some very scrupulous people." He also referred with pleasure to the fact that the working classes were taking an increased interest in the infirmary, as shown by their contributions having reached for a less period than one year nearly £2000.

GATESHEAD DISPENSARY.

Dr. Hardie, in his report presented at the annual meeting, showed that the work done at the Gateshead Dispensary was a marked increase over that of previous years The number of patients treated by letter was 3125, this number being made up of 2223 patients visited at their own homes and 902 patients able to attend at the infirmary. The casual patients consisted of 225 accidents, 503 teeth extractions, and 10,147 medical cases, making a total of 11,155 casuals. The total number of cases treated by the dispensary medical officers had been 14,280. The most notable feature in the table of infectious diseases was a heavy mortality from whooping-cough—out of a total of 52 deaths, exactly one-half being due to that cause.

SUNDERLAND EYE INFIRMARY.

The annual report of the North Durham Eye Infirmary shows that the register of new cases had now reached 1112, which was an increase of 48 on the previous year. The number of operations was 120, a decrease of 22 on the previous year. The decrease was accounted for by the enforced idleness in the shipyards and factories on the Wear.

Newcastle-on-Tyne, Feb. 8th.

EDINBURGH.

(From our own Correspondent.)

THE ROYAL SOCIETY.

A NUMBER of medical papers of considerable interest have lately been read at meetings of the Society. Prominent among them were two by Dr. Haycraft; one on his observations as to the existence of a reflex scratching centre in the spinal cord of mammals of several different species; the other dealing with a method of arresting coagulation of the blood when shed by receiving it into castor oil, which has nearly the same specific gravity as blood, and in which globules of blood remain suspended for some time, showing in an interesting manner the physical separation of the blood-corpuscles from the liquor sanguinis on such a scale as to be readily discernible by the unaided eye. More recently Professor Crum Brown has reverted to his classical studies of the semicircular canals, and has now devised and exhibited to the Fellows an ingenious model which demonstrates how these canals act in relation to equilibration and to the sense of direction of movement in the human subject. His attention was first called to the matter by a purely anatomical observation—namely, that on looking at a basis cranii from behind, in which these canals had been dissected out and left *in situ*, it was to be noted that each of the canals on the one side of the skull corresponded in the plane of its extension to one of those on the other side. The recognition of the canals as three sets of paired organs was a natural inference; and elaborate experiments, in many of which Dr. Crum Brown was himself the victim practised on, showed conclusively how they acted in concert in estimating movements of the head in the three planes of typical tridimensional space.

CLINICAL TEACHING IN EDINBURGH.

The joint commission of representatives of teachers and students is still continuing its labours, and is making some progress towards raising definite issues which the University and Infirmary authorities will have to consider carefully and decide upon. A provisional schedule of proposed alterations has been printed and submitted to the various clinical teachers for their opinion. In the main its proposals are wise and judicious; they tend chiefly in the direction of preventing the overlapping of important clinical classes which cannot at present be attended during the same session, and the division of the students into smaller

cliniques than at present are possible, each corps taking the round of the clinical teachers in rotation as instructors, and thus presumably coming in contact with a wider range of professional opinion and clinical methods than is now attainable. It is satisfactory to note that a spirit of marked moderation has so far attended the proposals of the reformers, and the work of the commission, so far, has been characterised by the cordial co-operation of all concerned in its undertakings.

MEDICO-CHIRURGICAL SOCIETY.

At the last meeting several interesting cases and specimens were exhibited, and an animated discussion ensued on the reading of Dr. M'Bride's paper upon the diagnosis of empyema of the maxillary antrum when nasal discharge is the only symptom. Professor Annandale also read an interesting paper on the surgery of the male bladder, illustrating his views by reference to a large and varied series of cases operated on by himself.

EDINBURGH ROYAL INFIRMARY.

Owing to the retirement of Dr. Sims Woodhead from the post of pathologist to the infirmary, the appointment of a colleague for Dr. Bruce, who shared the work of the department, is now vacant. Dr. William Russell and Dr. Barrett are both candidates for the post.

Edinburgh, Feb. 7th.

DUBLIN.

(From our own Correspondent.)

DUBLIN HOSPITAL SUNDAY FUND.

THE fourteenth annual meeting of the supporters of this Fund was held on Wednesday, the 8th inst., when the report of the Executive Council was read and other business transacted. At this meeting the following additions to the rules were proposed:—"That in the event of the Committee of Distribution being dissatisfied as to the management or efficiency of any of the hospitals whose authorities have applied for a share of the Fund during the year for which the committee is acting, the committee shall have power to withhold the grant from such hospital and report to the Executive Council the circumstances under which the grant has been withheld; on the reception of which report the Council shall have power to decide as to whether any, and what amount if any, of grant is to be paid to the authorities of such hospital. The Council shall at their first meeting in each year appoint a Visiting Committee, who shall be authorised to report as they may think fit upon all matters affecting the efficiency of the participating hospitals."

THE ROYAL BARRACKS, DUBLIN.

I lately recorded the death of an officer (Lieut. Campbell) from typhoid fever contracted in these barracks, and I hear that Lieutenant Tremayne of the 4th Dragoon Guards, is at present seriously ill in the barracks from a severe attack of the same kind of fever.

Sir Charles Cameron, in conjunction with Dr. Grimshaw, two eminent authorities on sanitary matters, in their report on the condition of these barracks, which will shortly be issued, have made certain recommendations which, if carried out in their entirety by the authorities, must conduce greatly to the health of those located in them. The question of the prevalence of enteric fever in the barracks, which was the main point in the inquiry that required to be elucidated, had to be considered not only from the probable cause of the cases of fever which had occurred, but also with reference to certain predisposing and originating causes of this disease which might exist in buildings situated and constructed as the Royal Barracks are. The site of the barracks, from a geological point of view, they consider to be defective, and the drainage arrangements require attention to put them in a satisfactory state. The plan and structure of the buildings are open to serious criticism. Royal-square is also badly situated, and the report states that its occupants cannot ever expect to be healthy until its insanitary conditions are mitigated. Many of the buildings are very old, and the floors are made worse instead of being improved by frequent washings. There are no plans of the old drains in existence, which are probably harmless when they carry only surface drainage; but they may become sources of danger, and therefore pipes should be substituted. Important drainage works have recently been carried out by the Royal Engineers, which must have a beneficial effect upon the health of the troops. The latrines are of an unsatisfactory kind. Besides recommending a thorough subsoil drainage of the entire site, the authors of the report in question suggest removal of considerable portions of the buildings which exclude light and air; and that the drainage from hospitals which contains discharges from patients with infectious diseases should not be admitted to the general sewers, and should be disinfected before admission into any sewer.

SIR GEORGE B. OWENS, J.P., M.D.

The friends of Sir George Owens, and they are very numerous, will be glad to learn that it is proposed to present him with a testimonial in recognition of his public services, and to mark the respect and esteem with which he is regarded. He has filled various offices, notably that of Lord Mayor of Dublin and High Sheriff, in a dignified and efficient manner, and his thorough honesty of purpose and unfailing courtesy are everywhere recognised. He has been chairman or deputy chairman of the Dublin South City Dispensary Committee for a quarter of a century, and is a valued member of many charitable institutions. An influential committee has been appointed, and there can be no doubt that the response to the committee will mark in no uncertain way the high esteem in which Sir George Owens is universally held by the members of the profession and the citizens of Dublin.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

At a meeting of the Section of State Medicine, held last week, Dr. C. Yelverton Pearson of Cork read a paper on the Medico-forensic Aspects of the Coachford Poisoning Case. The subject was handled in a thoroughly exhaustive manner, and a masterly *résumé* given of this interesting case. In the discussion which ensued, it was pointed out that, contrary to what was formerly believed, strychnine could be detected in the viscera for a very considerable period after death. Sir Charles Cameron alluded to the fact of the great similarity which existed between crystals of sulphur and arsenic; the resemblance, he affirmed, was remarkably close.

THE O'GRADY TESTIMONIAL.

I have been requested to state that, although the movement to present a testimonial to Mr. O'Grady was started by past students of Mercer's Hospital, it is in no way confined to that body. In other words, the matter has been set on foot by the past students to give both professional men and others an opportunity of expressing in a practical manner the high opinion they have of Mr. O'Grady's unceasing and disinterested efforts on behalf of Mercer's Hospital, not only in the interests of the sick poor, but also of the students and the profession at large.

NATIONAL CHILDREN'S HOSPITAL, DUBLIN.

From the annual report it appears that this valuable institution is still £1300 in debt, but it is satisfactory to learn that during the past year the sum of £700 was cleared off, and it is hoped that the benevolent public by their contributions will speedily wipe off the existing debt. Many important serious surgical operations were successfully performed during the past year, including excision of joints, osteotomy for genu valgum, fracture of curved bones of the legs for rickets, and operations for tenotomy in various forms of talipes, and amputations.

THE LATE ALEXANDER BECKETT, J.P., M.D., OF MONEYMORE.

This gentleman amassed a large fortune while in Australia, but for the past twenty-seven years he resided at Moneymore, where he was greatly esteemed and respected. The funeral took place last week, and was most numerously attended. The deceased was a very benevolent man, and has left large donations for various charitable purposes.

A School of Pharmacy, under the immediate superintendence of the Governor and Court of Directors of the Apothecaries' Hall, will be opened on March 1st.

The litigation between the College of Physicians and the Apothecaries' Hall is expected to commence in a week or ten days.

Another epidemic of measles is said to have broken out in co. Cork. This time the disease has occurred in the Schull district, and about thirty persons have been attacked.

Dublin, Feb. 8th.

PARIS.

(From our own Correspondent.)

THE PATHOGENY OF BRIGHT'S DISEASE.

AT a recent meeting of the Société des Hôpitaux Dr. Gaucher read a paper on the "Pathogeny of Bright's Disease," of which the following is a summary. The excessive introduction or the exaggerated production of extractive matters in the organism is the ordinary pathogenic condition of what the author terms "gros rein blanc" (epithelio-parenchymatous nephritis). The exaggerated introduction or the excessive production of extractive matters suffices of itself to produce the epithelial form of Bright's disease; but if chronic nephritis produced by another cause had already existed, the defective elimination of extractive matters will aggravate the renal lesion. From these experimental facts result important therapeutic teachings. In the first place there is the danger of employing meat broth in nephritis; for those suffering from Bright's disease "bouillon," or broth, is a poisonous solution. It is dangerous in all maladies; and even in healthy individuals, to employ extracts of meat, concentrated broths, and meat powders, which, besides the toxic mineral salts, principally the salts of potash, contain organic poisons and precisely all the excrementitious matters the noxious action of which has been demonstrated by the experiments undertaken by Dr. Gaucher.

COCAINE AS AN ANTISEPTIC.

Till now the attention of the profession has been directed principally to the therapeutic utilisation of the analgesic and toxic virtues of cocaine and its salts. Dr. Luton of Nancy has remarked that during its administration in doses of twenty-five centigrammes, and even more, the divers secretions—sweat, urine, the products of suppuration, and even fæcal matter—lose their fetidity. He proposes to employ this substance as an antiseptic agent administered interiorly, and to experiment with it in the place of carbolic acid and of corrosive sublimate in the adynamic stage of typhoid fever. The author adds that cocaine thus administered, or more especially in the form of enemata, would act both as a neurosthenic and as a disinfectant.

A HUMMING IDIOT.

Dr. Paris, of Châlons-on-the-Marne relates the following curious case in the *Archives de Neurologie*. It is that of an idiot fifteen years of age, who, not being able to pronounce a single word, incapable of receiving even the most elementary education that could be given to an idiot, daily hummed rather gracefully and correctly certain ancient airs, always the same, always in the same order, and without undergoing the least alteration from one day to another. Medical literature is not rich in facts of this kind. Morel, however, has published the history of an idiot who, the son and grandson of drum-majors, would, on having a drum and sticks given to him, at once execute "rolling" on it. The idiot now in question never had an instrumentalist among his ancestors, but, according to his mother, all the family were fond of singing, and this youth never heard anyone else sing but his father and mother. It has been utterly impossible to elicit the least spark from any part of the cerebral system of this degenerated being with the exception of one. It is, therefore, evident that this one point was prepared by heredity, and that this child must have been born with instincts, just the same as the drummer referred to by Morel.

CARBONATE OF SODA IN MILK.

The addition of the bicarbonate of soda to milk for its preservation has hitherto been tolerated by the police, but the Council of Hygiene of the Seine has condemned the practice, as it is not free from danger. The transformation of the sugar of milk into lactic acid gives rise, in milk so adulterated, to a lactate of soda which is purgative, and is thus a cause of diarrhœa in young children. Under these conditions, the Council considers that the addition of the bicarbonate of soda to milk, which is an aliment of the first order, and very often prescribed for invalids and children, should neither be authorised nor tolerated.

Paris, Feb. 7th, 1888.

FOOTBALL CASUALTY.—On the 4th inst., during a football match at Merrion, Dublin, a young man had his right leg broken by a kick in a scrimmage.

NEW YORK.

(From our own Correspondent.)

EXECUTION OF CRIMINALS.

A COMMISSION was appointed at the last session of the Legislature of New York to investigate and report on the most humane and practical method of carrying into effect the sentence of death in capital cases. The report has just been presented, from which it appears there exists in civilised countries at the present time only five different forms of execution—namely, the guillotine in ten, the sword in nineteen, the gallows in three, the musket in two, and the axe in one. The commissioners seem to have arrived at the following conclusions: 1. That the effort to diminish the increase of crime by the indiscriminate application of capital punishment to various offences, involving different grades of moral turpitude, or, in other words, by the enlarging of the number of offences to which capital punishment is made applicable, has proved a failure. 2. That any undue or peculiar severity in the mode of inflicting the death penalty neither operates to lessen the occurrence of the offence nor to produce a deterrent effect. 3. That from the long catalogue of various methods of punishment adopted by various nations at different times, only five are now practically resorted to by the civilised world. To all of the five existing methods the Commissioners insuperably object. The American plan of hanging is described as cruel, uncertain, liable to all kinds of mechanical complications, offering, more than any other, opportunities for suicide and other distressing efforts to defeat justice, or for clumsy and unskilful work of the executioner. The adaptation of electricity is thus urged: "Death, as a result, is instantaneous upon its application. It is the duty of society to utilise for its benefit the advantages and facilities which science has uncovered to its view. An electric shock of sufficient force to produce death cannot produce a sensation which can be recognised. The velocity of the electric current is so great that the brain is paralysed. Upon this subject, and also upon the general adaptability of electricity, Professor Elihu Thompson of Lynn, Mass., in reply to a communication from your commission, states: 'The most certain way to produce death would be to pass the current down the spinal cord from the crown of the head, as by the sudden application of wet surfaces or sponges. The result would be, I think, with a sufficiently strong current of the proper character, a painless extinction of all the faculties; and the current being kept on for a little time would result in such complete nervous exhaustion as to forbid any possibility of resuscitation by any means whatever.'" From a number of experiments performed on dogs by electricity as a means of destroying animal life, witnessed by the commissioners, the following deductions were drawn:—1. That death produced by a sufficiently powerful electric current is more rapid and humane than that produced by any agent at our command. 2. That resuscitation, after the passage of such a current through the body and functional centres of the brain, is impossible. 3. That the apparatus to be used should be arranged to permit the current to pass through the centres of function and intelligence in the brain. The commissioners, in conclusion, report on the plant and appliances necessary, and their cost, which would appear to be comparatively small, by the adoption of electricity for the execution of criminals. In the pursuit of their inquiry, the commissioners addressed all the Supreme Court justices, district attorneys, and sheriffs throughout the State, as well as the more distinguished medical and scientific men, and there was a consensus of opinion in favour of superseding hanging by the use of electricity.

RESTRICTIONS ON IMMIGRATION.

There is now before Congress a number of measures having for their object restrictions upon European immigration. Already laws have been passed which almost render Chinese immigration impossible, and now it is proposed to place restrictions upon the unlimited immigration of Europeans. Some of the facts brought out in the discussion of these Bills are of great interest. The total number of immigrants to this country since the formation of the Government is 14,266,760. The Chief of the Bureau of Statistics estimates the average value to the real wealth of the country of an immigrant at $800, or a total of $12,000,000,000. About 25 per cent. of the immigrants are

under fifteen years, and less than 15 per cent. over forty, leaving 60 per cent. in the prime of life, qualified for immediate service in developing our territory and in forwarding our enterprises. The majority of immigrants are without occupation, and hence are common labourers. In thirteen years (1873-86) 5,396,416 foreigners arrived, of whom 2,596,188 were without occupation and 128,782 were unknown. The nationality of immigrants during the nine months ending Sept. 30th, 1887, was as follows:—Great Britain and Ireland, 145,383; continental countries, 264,683, of whom Austria furnished 15,203, Hungary 10,073, Germany 88,725, Italy 38,057, Norway 15,971, Russia 19,052, Sweden 42,768. Asia, 515; Africa, 24; South America, 263; West Indies, 3468; Atlantic Islands, 1160; Pacific Islands, 1149. Total immigration for the nine months, 416,731. The feature of immigration which now excites public interest is the large number of persons arriving who belong to the defective, dependent, and delinquent classes. The census of 1880 shows that, while foreign-born citizens were 13½ per cent. of the population, they furnish more than 28½ per cent. of our insane, nearly 22 per cent. of our prisoners, more than 34 per cent. of our paupers in almshouses, and nearly 44 per cent. of the inmates of workhouses and houses of correction. The character of very many of the European emigrants is very low, as appears from the reports of American consuls. The consul at Bremen reports that "Bremen is the principal rendezvous for emigrants from all over the middle, eastern, and northern parts of Europe. From what I see and hear, I believe that the Bohemians, Hungarians, Poles, Italians, and poor Russian Jews who emigrate to the United States now are a worthless lot." The consul at Hamburg states that, "as the bulk of German emigration goes to the United States, so also the majority of the criminals and refuse of society who leave the country find their way there." Another consul writes of the large emigration from Roumania, Galicia, and the Russian provinces as follows: "The class of people emigrating from the said countries, with slight exceptions, are known to be mentally and physically neglected, if not crippled, notorious invalids, unfitted to perform manual labour or to earn their livelihood by honest work, nor is there any likelihood that they ever become educated to American citizenship."

The restrictive feature of the law contains the following provision: "The Secretary of State shall establish such rules and regulations and issue from time to time such instructions to consuls of the United States, not inconsistent with law or with treaty obligations, as shall enable well-disposed and worthy persons who desire to become residents or citizens of the United States to obtain certificates of character and fitness therefor from the consul of the district in which they reside, without hardship or unreasonable delay, which certificate shall contain, in addition to other specifications required by this Act, or which may be prescribed by the Secretary of State, the full name of the individual receiving the same, the place of birth, age, occupation, last legal residence, physical marks or peculiarities, and all facts necessary for the identification of such individuals; but no certificates shall be granted to any convict, except those convicted of political offences, nor to any lunatic, idiot, or any person unable to take care of himself or herself without becoming a public charge, nor to any anarchist, nihilist, or any person hostile to the principles of the constitution or form of government of the United States, nor to any believer or professed believer in the Mormon religion, who fails to satisfy the consul upon examination that he or she intends to and will conform to and obey the laws of the United States, nor to any person included in the prohibition in the Act to prohibit the importation and immigration of foreigners and aliens under contract or agreement to perform labour in the United States, the Territories, and the District of Columbia."

New York, Jan. 26th.

LIVERPOOL UNIVERSITY COLLEGE.—In order to raise funds for the completion of the University College buildings a meeting was held on the 6th inst. in the Town-hall, at which it was announced that the sum now required was £35,000. The trustees had twice previously made appeals, which resulted in subscriptions &c. of £100,000 in the first instance, and of £50,000 in the second. Announcement was made that Lord Derby had promised another £1000; Mr. George Holt, who had already given £7000, another £1000; Mr. Alfred Booth, £1000; Mr. Henry Tate, £1000; Mr. E. K. Muspratt, £1000; and the Mayor, Mr. T. W. Oakshott, 1000 guineas.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AN ordinary meeting of the Council was held on Thursday last, Feb. 9th.

The Minutes of the meeting of the Extraordinary Council on the 19th ult. were read and confirmed. Mr. J. H. Targett was appointed Assistant in the Pathological Department in the Museum.

The Council authorised the architect to proceed with the construction of the new building on the Embankment.

A correspondence was read between a physician, who is also a Member of the College, and the President in reference to the name of the former having been associated with a publication of a semi-medical character.

Mr. C. A. Ballance was elected Erasmus-Wilson lecturer.

A resolution was moved by Mr. Sibley, and adopted: "That in view of the increasing complications of the accounts of the College it is desirable that a Finance Committee be appointed to superintend the accounts and finance of the College, and to report thereon not less than twice in each year to the Council."

Medical News.

UNIVERSITY OF LONDON.—The following gentlemen have passed the Preliminary Scientific (M.B.) Examination held in January:—

Entire Examination.

FIRST DIVISION.—J. Howell Griffiths, Univ. Coll. Abervst. and St. Barthol. Hosp.; Wilfred Newell Soden, St. Barthol. Hosp.; Frank W. Wesley, Univ. Coll.

SECOND DIVISION.—Fanny Armitage, Yorkshire Coll.; James Hall, B.A., private study and Univ. Corresp. Coll.; W. John Johnson, Guy's Hosp.; A. Bassett Jones, Epsom and Univ. Colls.; Clarence H. Mott, Univ. Coll. and Univ. Corresp. Coll.

Two Subjects of the Examination.

V. Jenner Batteson,[1] Univ. Coll. and private study; C. Butcher,[2] Guy's Hosp.; Brice Collyer,[2] St. Barthol. Hosp.; P. Stanhope Eves,[2] Univ. Coll. and School; H. W. Jacob,[2] Trinity Coll., Dublin; Hugh M. Moore,[3] private study; Hugh Stanley Revell,[2] Univ. Coll. and School; Leonard Rogers,[2] St. Mary's Hospital; W. Turner,[2] King's Coll. and School; J. B. B. Wells,[1] St. Mary's Hosp. and private tuition.

One Subject of the Examination.

Gilbert J. Arnold,[4] St. Thomas's Hosp.; L. Wood Bathurst,[5] St. Barth. Hosp. and private study; Alice McW. Budgett,[4] Univ. Coll.; F. J. Carter,[5] St. Barthol. Hosp.; T. Carwardine,[5] Univ. Coll. and Middlesex Hosp.; J. Hy. Crawshaw,[5] Abp. Holgate's School, York, and private tuition; W. Edmond De Korté,[6] Univ. Coll.; H. Julius Jäger,[4] King's Coll.; Harold W. Lane,[4] Univ. Coll.; Harold Everett Pace,[5] Univ. Coll. and London Hosp.; Chas. Satchell Pantin,[5] Blackheath Propr. School and Univ. Coll.; Arthur Walton Peake,[6] Univ. Coll., Bristol; Ann Frances Piercy,[5] Queenswood School, Birkbeck Inst., and private study; F. Ronald Rowland,[6] Univ. Coll.; Whitley Stokes,[5] Trinity Hall, Camb., and King's Coll.; Herbert Stockley Taylor,[4] Univ. Coll.; J. Percival Tildesley,[5] Mason Coll., Birmingham; K. B. James Vickers,[4] Westminster School and St. Thomas's Hosp.

[1] Chemistry and Biology. [2] Chemistry and Physics.
[3] Physics and Biology. [4] Chemistry. [5] Physics. [6] Biology.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having passed the necessary examinations, and having complied with the regulations, were at a meeting of the Council on the 9th inst. admitted Members of the College:—

Andrews, Lancelot William, L.R.C.P.Lond., St. Barthol. Hosp.
Avarne, A. Blair, L.S.A., King Henry's-road.
Badcock, Arthur, L.K.Q.C.P.I., Leeds.
Bampfylde, James, L.S.A., Brockley.
Bays, James Thomas, L.S.A., Peterborough.
Bowman, Richard Oxley, L.R.C.P.Lond., Woodley.
Bray, G. A. Theodore, L.R.C.P.Lond., Gt. Russell-street.
Bromhead, F. Hodson, L.R.C.P.Lond., Loughboro'.
Brown, W. G. Stephens, L.R.C.P.Lond., Tollington-park.
Bulger, Alfred James, L.S.A., Dudley.
Calder, Frank, L.R.C.P.Lond., Bristol.
Carter, Wm. Jeffreys Beecher, L.R.C.P.Lond., Thistlegrove-lane.
Cautley, Edmund, L.R.C.P.Lond., Leeds.
Clark, C. Mackinnon, L.R.C.P.Lond., Dorking.
Clarke, G. Saunder, L.R.C.P.Lond., Grosvenor-road.
Cleveland, Henry Francis, L.R.C.P.Lond., Blackheath.
Collier, Horace Stansfield, L.R.C.P.Lond., Infirmary, Leicester.
Cotton, W. Mitchell, L.R.C.P.Lond., Marquis-road.
Cox, Charles A. Stanley Bell, L.R.C.P.Lond., Canterbury.
Cree, J. Douglas, L.R.C.P.Lond., St. John's-park.
Cundell, William Hatch, L.S.A., Kew.
da Costa, Francis Xavier, L.R.C.P.Lond., Fulham.
Daniell, Edgar Percy, L.R.C.P.Lond., College-st., Islington.
Darroll, William Burwell, L.R.C.P.Lond., Clun.
Davey, W. H. Hawker Carthew, L.R.C.P.Lond., Norwood.
Davies, Alfred Owen, L.R.C.P.Ed., Barmouth.
Devis, H. François, L.R.C.P Lond., Bristol.
Deyns, C. J., L.S.A., Upper Norwood.
Ducket, C. Alex. L.R.C.P.Lond., Great Yarmouth.
Durrant, T. Arnold, L.R.C.P.Lond., Kingston-hill.

Eccles, C. H., L.R.C.P.Lond., Brigg.
Edwards, C. Stanstay, L.R.C.P.Lond., Lindfield.
Elphick, H. W., L.R.C.P.Lond. Mecklemburgh-street.
Ewing, Andrew Melville, M.D.Toronto, Toronto.
Ferraby, G. A., L.R.C.P.Lond., Birmingham.
Forster, John Erwood, L.R.C.P.Lond., Molden.
Francis, T. W., L.R.C.P.Lond., Isledon-road.
Good, John, L.S.A., Aston Court, Tenbury.
Graham, W. ap Samuel James, L.R.C.P.Lond., Kilburn.
Grenfell, Wilfred Thomason, L.R.C.P.Lond., Stephens-sq.
Guiselin, Frentz W., L.R.C.P.Lond., Messina-avenue.
Hardy, W. E., L.R.C.P.Lond., Wellington, Salop.
Haring, Nathan C., L.S.A., Manchester.
Hearnden, E. Morgan, L.S.A., Sutton, Surrey.
Heaton, G., L.R.C.P.Lond., Handsworth.
Heffernan, Harold Hilton, L.R.C.P.Lond., North Southsea.
Holland, C. Thurston, L.R.C.P.Lond., Morington-road.
Holt, Arthur Knight, L.R.C.P.Lond., Perry-vale.
House, F. Maurice, L.R.C.P.Lond., Cowley-street, Westminster.
Jeeves, Frank, L.R.C.P.Lond., Scarboro'.
Jermaine-Lulham, F, Sidney, L.R.C.P.Lond., Farnham.
Johnston, C. Saint, L.S.A., Birmingham.
Jones, John, L.R.C.P.Lond., Penge.
Kershaw, Eric E., L.R.C.P.Lond., Shepton Mallet.
Layng, Henry, L.R.C.P.Lond., Alderney-street.
Langley, R. Jackson, L.R.C.P.Lond., Reading.
Lisboa, Patrocinio, L.M. and S.Bombay, Woburn-place.
Lissaman, Thomas, L.R.C.P.Lond., Millman-street.
Lister, C. Edmond, L.K.Q.C.P.I., Halifax, York.
Lucas, Albert, L.R.C.P.Lond., Leconfield-road.
Maberley, John, L.R.C.P.Lond., Bath.
McIlroy, J. Black, L.R.C.P.Lond., Shooters Hill.
Magauran, James, L.K.Q.C.P.I., Crechan, Cavan, Ireland.
Maisey, C. T. Boodle, L.R.C.P.Lond., Charlbury, Oxon.
Marriott, Horace Bruce, L.R.C.P.Lond., Ipswich.
Miller, A. Dixon, L.R.C.P.Lond., Birmingham.
Mothersole, R. Devereux, L.R.C.P.Lond., East Dulwich.
Mould, George Thomas, L.R.C.P.Lond., Tavistock-crescent.
Ogilvie, Fergus Menteith, L.R.C.P.Lond., Park-lane.
Ord, W. T., L.R.C.P.Lond., Bournemouth.
Peaker, J. Wilcox, M.B.Toronto, Brampton, Ontario.
Phillips, J. Northey, L.R.C.P.Lond., Goginan, Aberystwith.
Prankerd, Herbert Peter, M.B.Edin., Bayswater.
Randall, E. Bidgood, L.R.C.P.Lond., Sasset, Southampton.
Rees, J. L.R.C.P.Lond., Penyffoss, Rhydlewes, S. Wales.
Rees, J. Llewellyn, L.R.C.P.Lond., St. Peter's-street, Mile-end.
Reeves, J. Kinghan, L.R.C.P.Lond., Beckenham.
Roberts, Ashley C., L.R.C.P.Lond., Eastbourne.
Robinson, A. Hepworth, L.S.A., Low Moore, near Bradford.
Robinson, T., L.R.C.P.Lond., Burton-on-Trent.
Rossall, J. Crofts, L.R.C.P.Lond., Maida Vale.
Salisbury, C. Rainson, L.R.C.P.Lond., Leicester.
Sapp, J. G. Victor, L.R.C.P.Lond., Southsea.
Scott, Arnold, L.R.C.P.Lond., West Kensington.
Scott, H. J. H., L.R.C.P.Lond., Heathcote-st.
Shipton, H., L.R.C.P.Lond., Buxton.
Smeeton, C. W., L.R.C.P.Lond., Reginald-terrace.
Smith, T. Manners, Cambridge.
South, Fredk. W., L.S.A., Downham Market.
Spencer, H. Alex., L.R.C.P.Lond., Lansdown-place.
Spink, Chris. Pierson, L.R.C.P.Lond., Cavendish-terrace.
Starling, E. H., L.R.C.P.Lond., Alexander-road.
Streatfield, P. W., L.R.C.P.Lond., Maidstone.
Symonds, H., L.R.C.P.Lond., John-street, Hampstead.
Teichelman, Ebenezer, L.K.Q.C.P.I., Birmingham.
Thompson, Robert, L.R.C.P.Lond., Lewisham.
Tyacke, Nicholas, L.R.C.P.Lond., Kernick Penryn, Cornwall.
Tyrrell, Arthur Frederick, L.R.C.P.Lond., Putney.
Wadham, Frank Jesser, L.R.C.P.Lond., New Hampton.
Walker, Jas. Herbert, L.R.C.P.Lond., Albert-street.
Wayte, John, L.R.C.P.Lond., Sloane-terrace.
Weatherly, Arthur John, L.R.C.P.Lond., Seven Springs, Oxford.
Weekes, Chas. Jones, L.R.C.P.Lond., Harrington-street.
Wilson, Arch. Scarlyn, M.B.Cantab., St. Leonard's-on-Sea.
Winter, Herbert Edmund, L.R.C.P.Lond., Blackheath.
Wise, Henry Wellsted, L.R.C.P.Lond., Edinburgh.
Woodyatt, John Fred., L.R.C.P.Lond., Macclesfield.
Wyatt, W. Lionel, L.R.C.P.Lond., Corse Vicarage, Gloucester.
Young, Thomas Brett, L.R.C.P.Ed., Halesowen.

INDIAN MEDICAL SERVICE.—The following is the list of surgeons on Probation in this Service who were successful at both the recent London and Netley examinations. The prizes are awarded for marks gained in the special subjects taught at the Army Medical School. The final positions of these gentlemen are determined by the marks gained in London added to those gained at Netley, and the combined numbers are accordingly shown in the following list:—

	Combined Marks.		Combined Marks.
*Roberts, A. E.	6410	Jones, J. L. T.	5110
†Davidson, D. M.	6055	Buchanan, W. J. ...	5030
‡Maynard, F. P.	5895	Close, J. K.	4965
Lamont, J. C	5860	Macnamara, J. M. ...	4915
Nott, A. H.	5715	Jennings, W. E. ...	4900
§Holt, J.	5675	Brabazon, H. M. ...	4885
Coleman, A.	5405	Ingham, W. H. M. ...	4860
White, W. W.	5390	Dewes, F. J.	4845
Lane, D. T.	5380	Pinto, J. O.	4805
Macwatt, R. C.	5330	Strickland, P. C. H.	4790
Woodwright, W. H. E.	5290	Stewart, T. W.	4575
Griffith, T. H.	5130		

* Gained the Martin Memorial Gold Medal, and the Prize in Clinical Medicine presented by Surgeon-General W. C. Maclean, C.B.
† Gained the Herbert Prize of £20, the Montefiore Medal and Prize of 20 guineas, with the Parkes Memorial Bronze Medal.
‡ Gained the Prize in Pathology presented by Sir Thos. Crawford, K.C.B.
§ Gained the Montefiore Second Prize.

UNIVERSITY OF BOMBAY.—The following have, amongst others, been recently nominated Fellows of the University:—Surgeon W. K. Hatch, M.B., M.R.C.S., and Surgeon R. Manser, M.R.C.S., L.S.A.

TRICHINOSIS.—An epidemic of this disease is reported to have broken out at Obercunewald, in Prussia. The latest advices give 120 as the number of attacks, with six deaths.

THE Goole Board of Guardians have unanimously decided, subject to the sanction of the Local Government Board, to grant a retiring allowance of £160 per annum to Dr. Cass, the late medical officer of the union.

GROCERS' LICENCES.—The Bishop of Liverpool, at a meeting recently held to promote a home for inebriates in that city, attributed the deplorable increase of intemperance among women to grocers' licences.

VACCINATION GRANT.—Mr. W. F. Sheard, medical officer and public vaccinator of the Putney district, has received the Government award for efficient vaccination (fourth time).

GLASGOW SAMARITAN HOSPITAL.—At the annual meeting in connexion with the Glasgow Samaritan Hospital for Women on the 3rd inst., an appeal was made in the report for the sum of £5000, to erect a new building for the institution.

UNIVERSITY OF OXFORD.—Candidates wishing to compete for the Rolleston Memorial Prize, which will be awarded next Hillary Term, are reminded that memoirs should be forwarded to the Registrar of the University before March 31st, 1888, and should be inscribed "Rolleston Memorial Essay."

MEDICO-PSYCHOLOGICAL ASSOCIATION.—A quarterly meeting will be held at Bethlem Hospital on Friday, Feb. 24th, at 4 P.M. A meeting of the Council will be held at 3 P.M., after which Dr. Hughlings Jackson will read a paper on "Post-epileptic States." The members will dine together in the evening, at 7 P.M., at the Holborn Restaurant.

THE PROPOSED EPIDEMIC HOSPITAL, NOTTINGHAM.—At a meeting of the Town Council, held on Monday last, a report from the Health Committee recommending the expenditure of £25,000 on a permanent infectious hospital at Bagthorpe gave occasion for considerable discussion, and ultimately the matter was deferred for two months—an alderman stating that there was already sufficient provision for meeting all emergencies.

CITY OF LONDON TRUSS SOCIETY.—At the annual meeting of the supporters of this Society on the 1st inst., it was reported that the income for the past year from all sources had amounted to £4066, and the expenditure to £4874. During 1887 no fewer than 9311 patients were relieved, and since the foundation of the charity in 1807 432,000 men, women, and children in different parts of the kingdom have been assisted.

SOUTHPORT CONVALESCENT HOSPITAL.—The annual report for 1887 shows that 4021 patients (2359 males and 1662 females) had been admitted during the year, being an increase of ninety-four on the previous year, the most successful in point of numbers on record. Seven deaths had occurred, which had been the average for the past ten years. The investment fund now amounted to £10,661 14*s.* 3*d.*, which had been increased during the year by a legacy of £2706 6*s.* 9*d.* under the will of the late Mr. George Redford, of Southport.

CITY OF LONDON LYING-IN HOSPITAL.—The 137th annual report, just issued, expresses satisfaction of the past year's working: 356 women had been delivered in the hospital during the year, as against 283 in 1886; 358 children were born—177 boys and 181 girls; seven children were still-born, and one woman had died; the death of the mother (from extraneous causes) was the only death since May, 1886, out of 506 delivered. The mortality was under 2 per 1000. The out-patients attended in one year numbered 1204. Great success had attended the employment of midwife pupils, and the training school for midwives and monthly nurses continued in a prosperous condition. The income from all sources amounted to £3215, and the expenditure to £2723, leaving a balance of £491. The annual subscriptions had increased by £28.

ST. JOHN AMBULANCE ASSOCIATION.—A "first aid" class of the above Association has been formed by the Duchess of Albany at Esher, her Royal Highness herself attending the lectures.

DEEP-SEA FISHERMEN.—Mr. James Knott, of Newcastle-on-Tyne, has presented to the Council of the Mission to Deep-sea Fishermen, a valuable fifty-eight ton sailing yacht, suitable for their work amongst the smacksmen on the North Sea.

CENTENARIANS.—The death is announced in Dublin of Mrs. Bridget Dempsey Coolehan, at the advanced age of 106 years. It may be mentioned that Mrs. Coolehan's grandfather died in 1821 at the same age.—Mrs. Elizabeth Stillman of Newbury, who would have reached the age of 102 in April next, died on the 28th ult. Mrs. Stillman's father died at the great age of 105 years.—Miss Caroline Heathorne, well known as the "Maid of Kent," died on the 3rd inst., at Maidstone, in her 105th year.

THE old students of St. Thomas's Hospital will hear with deep regret of the death of Mr. W. C. Elliot, in his sixtieth year. For the last thirty-five years Mr. Elliot has been responsible for the charge of the surgical instruments and appliances at the hospital. He was greatly respected by successive generations of students, many of whom are indebted to him for much personal kindness and advice. This feeling of universal esteem and respect found practical expression some four years ago, when a testimonial was presented to him by past and present students in recognition of his long and valued services.

PRESENTATIONS.—On the 27th ult. the officers of the Hackney Union presented R. Evans, Esq., late assistant medical officer of the infirmary and workhouse, with a testimonial, in the shape of a clock and two bronze vases, as a token of their respect and good wishes on his leaving them to start in private practice in the neighbourhood. The presentation was made by the chaplain, and the inscription on the plate was as follows: "Presented by the officers of the Hackney Union to R. Evans, Esq., M.R.C.S., L.R.C.P., on his relinquishing the office of assistant medical officer of the infirmary and workhouse. Sept. 12th, 1887."—Mr. T. W. Thompson has been presented with a handsome silver inkstand, a silver salver, and a purse containing £100 on the occasion of his relinquishing practice after a seven years' residence at Potter's Bar.

THE METROPOLITAN BOARD OF WORKS AND THE THEATRES.—A deputation from the Parliamentary Committee of the Board waited on the Home Secretary, on the 28th ult., on the subject of the Board's Bill for the further regulation of theatres and music-halls. The Home Secretary was reminded that the idea of putting these places of public entertainment under the Board's control did not originate with the Board, but with Parliament. Legislation in 1878 and 1882, in respect to theatres and music-halls, conferred powers on the Board the subsequent exercise and result of which were explained in detail. Allusion was made to some of the statements of the deputation of theatre managers which waited on Mr. Matthews in December last—statements which, it was alleged, betrayed an astonishing want of accuracy. Finally, the Home Secretary was asked if he could state whether the Government intended to introduce a Bill on the subject in the forthcoming session, and if not, whether the Government would support the Board's Bill, a copy of which had been sent to him. Mr. Matthews, in reply, could not then say what the Government intended to do as to further legislation on the subject in question, but thanked the deputation for the information laid before him, and for the promise of the Board's co-operation in any action which the Government might think desirable to adopt.

CHARING-CROSS HOSPITAL.—The annual court of governors of this hospital was held in the Board-room on Wednesday afternoon. The treasurer, Mr. J. B. Martin, presided. In their sixty-seventh annual report the Council stated that twenty-five out of the thirty beds withdrawn in 1880 had been restored. During the past year there were received for treatment 1686 in-patients, a larger number than in any previous year, and 20,306 out-patients, including cases of accident and emergency, have been treated, making a total of 21,992, of which only 2863 brought letters of recommendation. The year had closed with a heavy debt to the bankers, in addition to liabilities in respect of ordinary requirements for the last quarter of the year. The total amount received during the year was £15,314, together with legacies to the amount of £3435. The expenditure chargeable to the year 1887 was £13,145. A very strong representation has been received by the Council from the staff of the school with reference to the urgent necessity for increased accommodation for the students. In 1881, when the present school building was opened, there were 134 students; there are now 224, and there is not sufficient room for them. The Council are therefore convinced of the immediate necessity for enlarging the building, and negotiations are now proceeding with the manager of the London estate of the Duke of Bedford for acquiring a site on the east side of the school, the lease of which has just expired. The estimated cost of the extension is £5000, and the treasurers will gladly receive any special contributions for this purpose. It is claimed that no hospital is more worthy of increased support. Hardly one great State function or public rejoicing—and to which, for the past year, may be added public disturbance—takes place without an extra demand being made on the resources of the hospital. On Jubilee Day ninety-five cases were treated; while on Nov. 13th, the day of the disturbances in Trafalgar-square, seventy-five cases arrived at the hospital within three hours, and were promptly attended to.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ADAMS, JAMES, M.D.Aber., M.R.C.S., has been reappointed Medical Officer to the Ashburton and Buckfastleigh Cottage Hospital.

BARKER, JOHN, M.B.Dur., M.R.C.S., has been appointed Medical Officer for the Maker District of the Reeth Union.

CARTER, ROWLAND WIMBURN, M.D., M.R.C.S., L.S.A., has been appointed Surgeon to the Weymouth Royal Hospital and Dispensary, vice F. C. G. Griffin, M.A., M.B., M.R.C.S., resigned.

COURTEEN, RAYMOND, M.B., M.R.C.S., has been appointed Resident Medical Officer to the City of London Hospital for Diseases of the Chest, Victoria-park, E., vice H. G. Harsant, resigned.

FOX, RICHARD J., M.B., C.M.Ed., has been appointed Second Assistant Medical Officer to the Sussex County Asylum, Hayward's-heath, vice M. O. Manson, M.R.C.S., L.R.C.P., resigned.

GROWSE, WILLIAM, B.A.Oxon., M.R.C.S., L.R.C.P.Lond., has been appointed Medical Officer and Public Vaccinator to the Marton District of the Rugby Union.

HAMILTON, A. A., L.R.C.P.Ed., L.R.C.S., has been appointed Medical Officer for the Crowle District of the Thorne Union.

HODGSON, MICHAEL, B.A.Durh., M.B., C.M.Ed., has been appointed Medical Officer for the Chipping Warden District of the Banbury Union.

LIVINGSTON, JOHN LOCKHART, M.D., M.S., M.A.O. Roy. Univ. Irel., has been appointed House-Surgeon to the Bristol Hospital for Sick Children and Women, vice H. F. Semple, M.R.C.S., L.R.C.P., resigned.

LYS, HENRY GRAHAM, M.B.Lond., M.R.C.S., has been appointed House-Surgeon to the London Hospital.

MAUGHAN, JAMES, M.D.Brux., M.R.C.S., L.R.C.P.Lond., has been appointed Lecturer on Histology to the National Dental College, vice Thomas Gaddes, L.D.S.Eng. & Ed., resigned.

PEAKE, W. PEMBERTON, M.R.C.S., L.R.C.P.Lond., has been appointed Assistant Medical Officer to the St. Marylebone Infirmary, Nottinghill, W., vice Raymond Courteen, M.B., resigned.

PEARSON, HESLOP L., L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Second District of the Birkenhead Union.

RANNIE, ROBERT, M.B., C.M.Aber., has been appointed Medical Officer for Peterculter, Maryculter, and Drumoak.

UBSDELL, HENRY, M.R.C.S., L.S.A., has been reappointed Medical Officer to the Ashburton and Buckfastleigh Cottage Hospital.

VISGER, HARMAN, M.R.C.S., L.S.A., has been appointed Medical Officer to the Hospital of the Lewisham District Board of Works.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

ASHFORD FRIENDLY SOCIETIES AND PUBLIC MEDICAL ASSOCIATION.—Senior Medical Officer. Salary £150 per annum, with residence.

BIRMINGHAM CENTRAL HOSPITAL.—Assistant House-Surgeon. Board, residence, and washing, but no salary.

BROMPTON CANCER HOSPITAL, S.W.—Pathologist. An honorarium of £80 will be voted at the end of the year.

CIRENCESTER UNION.—Medical Officer for the Union Workhouse and the South District. Salary for the joint appointment £115 per annum, exclusive of vaccination fees and such extra medical fees as are allowed by the Local Government Board.

HARLSWOOD ASYLUM FOR IDIOTS, Redhill, Surrey.—Medical Superintendent.—Salary £500, with furnished apartments in the building together with coals and gas.

EAST SUFFOLK HOSPITAL, Ipswich.—Assistant House-Surgeon. Board, lodging, and washing, but no salary.

HOSPITAL FOR WOMEN, Soho-square, W.—Clinical Assistants in the Out-patient Department. Fee for course of six months five guineas.

LIVERPOOL NORTHERN HOSPITAL.—Assistant House-Surgeon. Salary £70 per annum, with residence and maintenance in the house.

METROPOLITAN HOSPITAL, Kingsland-road, E.—Ophthalmic Surgeon.

STAFFORD GENERAL INFIRMARY.—Assistant House-Surgeon. Board and lodging, but no salary.

YORK COUNTY HOSPITAL.—Senior House-Surgeon. Salary £100 a year, with board, &c.

YORK DISPENSARY.—Three Resident Medical Officers. Salary £130 a year, with furnished apartments, coals, and gas.

Births, Marriages, and Deaths.

BIRTHS.

COOKSON.—On the 5th inst., at South-Ridge House, Chicklade, Salisbury, the wife of Surgeon-Major H. Cookson, F.R.C.S., of a son.

DAVENPORT.—On the 31st ult., at St. Kilda, Melbourne, Victoria, the wife of Arthur F. Davenport, M.B.Lond., of a daughter.

FENWICK.—On the 2nd inst., at 5, Old Burlington-street, W., the wife of E. Hurry Fenwick, F.R.C.S., of a daughter.

MARRIAGES.

COMBES—CROUCH.—On the 1st inst., at St. Peter's, Belsize, by the Rev. Dr. Tremlett, Reginald Hare Combes, Surgeon, of Galeston, Eton-avenue, N.W., son of Edward Combes, C.M.G., of Glanmire, New South Wales, to Nelly, eldest daughter of Charles W. Crouch, of 35, Fellowes-road, Hampstead.

GUTHRIE—KERR.—On the 1st inst., at the Congregational Church, Square-road, Halifax, by the Rev. Eric A. Lawrence, Pastor, assisted by the Rev. Bryan Dale, M.A., James Ashton Guthrie, M.B., of 14, King-cross-street, and 22, Carlton-street, Halifax, eldest son of Daniel Guthrie, of Albion Lodge, Brierley-hill, Staffs., to Emily, youngest daughter of Robert Kerr, of Milton-place, Halifax. No cards.

HELSHAM—REDPATH.—On the 4th inst., at the Church of St. Philip, Sydenham, Hugh Paul Helsham, L.R.C.P., M.R.C.S., of 24, Ridge-road, Stroud-green, N., to Jessie Jane Redpath.

JAMES—CORMACK.—On the 7th inst., at the Cathedral, Bombay, William, third son of Edward James, J.P., of Greenbank House, Plymouth, to Caroline, youngest daughter of the late Sir John Rose Cormack, M.D.Ed. and Paris.

LUBBOCK—MACNAMARA.—On the 1st inst., at Westminster Abbey, Montagu Lubbock, M.D., to Nora, eldest daughter of Nottidge Chas. Macnamara, F.R.C.S., of 13, Grosvenor-street.

DEATHS.

CLARKSON.—On the 4th inst., at Hampstead, William Hill Clarkson, formerly of Romford, Surgeon.

COCHRANE.—On the 5th inst., at his residence, in Old Trafford, Manchester, George Cochrane, M.R.C.S., L.S.A., aged 78.

HARDIN.—On the 1st inst., at Chichester, Walter Hardin, M.D., late of Landport-terrace, Southsea, and of West Drayton, Middlesex.

MONK.—On the 1st inst., at his residence, Church-street, Preston, Thomas Monk, Surgeon, aged 89.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

APPLETON & Co., New York.

Transactions of the American Gynæcological Society. Vol. XII. For the year 1887. 1888. pp. 512.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.

Laryngoscopy and Rhinoscopy, in the Diagnosis and Treatment of Diseases of the Throat and Nose. By Prosser James, M.D. Fifth Edition, Enlarged, Illustrated with Hand-coloured Plates 1888. pp. 275.

CASSELL & Co., London, Paris, New York, & Melbourne.

The Diseases of the Breast. By Thos. Bryant, F.R.C.S. With 13 Engravings and 8 Chromo-lithographs. 1887. pp. 358.

The Year-book of Treatment for 1888. A Critical Review for Practitioners of Medicine and Surgery. pp. 336.

CHURCHILL, J. & A., New Burlington-street, London.

Lectures on Certain Diseases of the Jaws. Delivered at the Royal College of Surgeons of England, 1887. By Christopher Heath, F.R.C.S. Illustrated. 1888. pp. 128.

Note-book for Dental Students. Dental Anatomy and Physiology. By James Rymer, L.D.S.Eng., M.R.C.S. 1888. pp. 67.

The Hospital Prayer Book; containing Prayers for Daily and occasional use. Also a short form of Public Service for Lay Readers in Hospitals. By E. J. Waring, C.I.E.M.D. Second Edition. 1888. pp. 111.

JOHNSTONE, W. & A. K., Edinburgh & London.

The Comparative Anatomy of the Domesticated Animals. Part I.: Osteology. By J. McFadyean, M.B., C.M., B.Sc. pp. 166.

LEWIS, H. K., Gower-street, London.

Gout, and its Relations to Diseases of the Liver and Kidneys. By Robson Roose, M.D., F.C.S. Fifth Edition. 1888. pp. 175.

LONGMANS, GREEN, & Co., Paternoster-row, London.

The Story of Creation, a plain Account of Evolution. By Edward Clodd. 1888. pp. 242.

MACMILLAN & Co., London and New York.

Practical Physics for Schools and the Junior Students of Colleges. By Balfour Stewart and W. W. Haldane Gee. Vol. I.: Electricity and Magnetism. 1888. pp. 221.

Lessons on Prescriptions and the Art of Prescribing. By W. H. Griffiths, Ph.D., L.R.C.P.E. New Edition, adapted to the British Pharmacopœia of 1885. 1888. pp. 150.

PENTLAND, YOUNG J., Edinburgh.

Diseases of the Skin. A Manual for Practitioners and Students. By W. Allan Jamieson, M.D., F.R.C.P.Ed., with woodcut and 8 Coloured Illustrations. 1888. pp. 546.

Students' Pocket Medical Lexicon, with an Appendix. By Elias Longley. A new Edition. 1888. pp. 303.

SAWYER, N., & SON, Boston, U.S.

Three hundred and eighty-four Laparotomies for various Diseases, with Tables, showing the Results of the Operations and the Subsequent History of the Patients. By John Homans, M.D. 1887. pp. 56.

SWAN SONNENSCHEIN, LOWREY & Co., Paternoster-square, London.

A Student's Manual of Psychology, adapted from the "Katechismus der Psychologie" of Friedh. Kirchner. By E. D. Drought. 1888. pp. 344.

VOGEL, F. C. W., Leipzig; WILLIAMS & NORGATE, London.

Die Pathogenese der Epidemischen Diphtherie. Von Dr. M. J. Oertel. Mit Atlas von 16 Chromo-lithographirten Tafeln. 1887. pp. 185.

WHITTAKER & Co., London.

Dod's Peerage, Baronetage, and Knightage of Great Britain and Ireland. 1888. pp. 966.

Men and Women of the Day: A Picture Gallery of Contemporary Portraiture; No. 1, for January, 1888 (R. Bentley and Son, New Burlington-street, London).—Index Medicus, compiled by John S. Billings, Surgeon, U.S. Army, and Dr. Robert Fletcher, M.R.C.S.Eng.; Vol. ix., No. 12, December, 1887 (Trübner and Co., Ludgate-hill, London).—Die Sectio alta Subpubica; eine anatomisch-chirurgische Studie; von Dr. Carl Langenbuch.—Nebst einer Vorbemerkung; von Dr. W. Waldeyer; mit 4 Holzschnitten in Buntdruck (August Hirschwald, Berlin, 1888).—Iliac Phlegmons: Some Considerations of Anatomical and Surgical Interest; by Rudolph Matas, M.D. Part I.—Shepherd's First Aid to the Injured; revised and rearranged by R. Bruce, 1887 (copies to be had at the St. John Ambulance Association, St. John's-gate, Clerkenwell, London).—Ueber Volksbäder; von Dr. Oscar Lassar, Berlin; Zweite Vermehrte Auflage, mit vier Abbildungen (Verlag von Friedrich Vieweg und Sohn; Braunschweig, 1888).—Transactions of the American Ophthalmological Society; Twenty-third Annual Meeting, 1887 (published by the Society, Boston. 1887).—Transactions of the American Dermatological Association, at the Eleventh Annual Meeting, 1887; by the Secretary, G. H. Tilden, M.D. (Boston, 1887).—A Monograph on "Surra," or Pernicious Anæmia in the Lower Animals; by R. W. Burke, M.R.C.V.S., A.V.D., 1888 (Imperial Printing Press, Jubbulpore).—A Guide to the Choice of a Site for Residential Purposes; by a Member of the Geologists' Association (Henry Sutton, Station-road, Redhill, Surrey, 1887).—The Zoophilist; London, Feb. 1st, 1888 (Pewtress and Co., Little Queen-street, Lincoln's-inn-Fields, London).—Man's Injustice to Animals; the Brown Animal Sanatory Institution (Pickering and Chatto, Haymarket, London, 1887).—Some Comments on Leprosy in its Contagio-syphilitic and Vaccinal Aspects; by A. M. Brown, M.D. (Hirschfeld Brothers, Bream's-buildings, Fetter-lane, London, 1888).—Massage Sèche; by Tom Cecil, B.Sc., Paris, 1882-84 (Simpkin, Marshall, and Co., Stationers' Hall-court, London, 1888).—Étude Clinique et Bactériologique sur les Fièvres palustres de la Grèce; par Dr. P. S. Pampoukis (A. Lanier, 14, Rue Séguier, Paris, 1888).—Pharmacothérapie Dosimétrique comparée, ou Guide pour l'Étude des Principaux Médicaments Nouveaux; par Dr. S. Laura (Paris Institut de Médecine Dosimétrique, C. Chanteaud et Cie, 54, Rue des Francs-Bourgeois, Paris, 1887).—A Positive Specific for Hydrocele, Boils, Rheumatism, and Lumbago; by J. E. Scott, for twenty-three years a resident in Asia (the Strand Publishing Company, 172, Strand, London, 1887).—Outlines of the Course of Practical Physiological Chemistry, University College, Liverpool; by F. C. Larkin and Randle Leigh (W. Davies, 22, Tower Chambers, Liverpool, 1888).—The British and Colonial Druggists' Diary, 1888 (21, New Bridge-street, London).—Self-help Emigration Society; the Third Annual Report, 1887 (office of the Society, 50, Fleet-lane, Farringdon-street, London, 1888).—The Pasteur Treatment for Hydrophobia; by H. Whitmarsh, M.D., M.R.C.P., M.R.C.S. (Simpkin, Marshall, and Co., Stationers' Hall-court, London, 1888).

Medical Diary for the ensuing Week.

Monday, February 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M. and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. J. Bland Sutton: Evolution in Pathology.
SOCIETY OF ARTS.—8 P.M. Mr. A. Gordon Salamon: Yeast, its Morphology and Culture (Cantor Lecture).
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Donald Hood: The Treatment of Rheumatic Fever, with especial reference to the Use of the Salicylates.—Dr. Kent Spender: Some hitherto Undescribed Symptoms in the Early History of Osteo-arthritis.

Tuesday, February 14.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.
ROYAL INSTITUTION.—3 P.M. Mr. G. J. Romanes: Before and after Darwin.
SOCIETY OF ARTS.—8 P.M. Mr. Henry B. Wheatley: The Principles of Design, as applied to Bookbinding.

Wednesday, February 15.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-ST.—Operations, 9 A.M.; Saturday, same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. J. Bland Sutton: Evolution in Pathology.
SOCIETY OF ARTS.—8 P.M. Mr. John Harrison: Type-writers and Type-writing.

Thursday, February 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. C. Hubert H. Parry: Early Secular Choral Music (with Illustrations).
THE PARKES MUSEUM OF HYGIENE.—5 P.M. Dr. J. F. Payne: Plagues, Ancient and Modern.
SOCIETY OF ARTS.—8 P.M. Prof. Hubert Herkomer: Etching, and Mezzotint Engraving.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. Stephen Mackenzie: Some cases of Hysteria.—Dr. Lees: Case of Hysteria.—Mr. Silcock and Dr. Maguire: Death with Symptoms of Hysteria.

Friday, February 17.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. J. Bland Sutton: Evolution in Pathology.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Mr. H. E. Armstrong: Port Sanitary Administration on the Tyne; a Seven Years' Retrospect.—Mr. Campbell Munro: Sanitary Administration in the United States.
ROYAL INSTITUTION.—9 P.M. Sir Henry Doulton: Some Developments of English Pottery during the last Fifty Years.

Saturday, February 18.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Lord Rayleigh: Experimental Optics.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, February 9th, 1888.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 3	30·04	W.	39	37	52	47	25	·08	Overcast
,, 4	30·21	W.	45	44	55	51	38	...	Overcast
,, 5	30·32	W.	47	45	57	52	41	...	Cloudy
,, 6	30·21	N.	48	46	59	53	44	...	Overcast
,, 7	30·25	W.	46	43	60	51	43	...	Cloudy
,, 8	30·01	W.	45	44	...	51	42	·06	Overcast
,, 9	29·99	N.W.	49	46	66	51	44	·05	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
All communications relating to the editorial business of the journal must be addressed "To the Editors."
Lectures, original articles, and reports should be written on one side only of the paper.
Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
We cannot prescribe or recommend practitioners.
Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*
We cannot undertake to return MSS. not used.

SUPERSTITIOUS CURES FOR EPILEPSY.

E. S. M. (Boulogne).—The blood of dying gladiators in the ancient amphitheatres was popularly believed to be a remedy for the falling sickness or *morbus comitialis*. It was eagerly drunk while still warm by sufferers from the malady. The practice denounced by Celsus as a "miserum auxilium" has not died out even in our century. Des Étangs, in his edition of the Roman Hippocrates (Paris, 1846), mentions the then recent case of an old epileptic woman in Sweden, who, on the occasion of a criminal being guillotined, was seen at the foot of the scaffold ready, when the head was severed from the body, to plunge into the blood yet reeking from the victim, a piece of bread she had destined for her cure.

Provincial.—Unless the case be quite exceptional, it is very desirable for the vendor and purchaser each to be represented by a separate solicitor. We cannot refer our correspondent to any treatise.

THE THERMOPILE AS A MEANS OF HEATING THE CAUTERY.

To the Editors of THE LANCET.

SIRS,—Having asked the opinion of a scientific friend as to the practical usefulness of the thermopile for the purpose of heating the galvano-cautery, I have received the following reply:—

"*On the Use of the Thermopile and Secondary Batteries as a Convenient Means of producing Electricity for Medical and Surgical purposes. By Alexander Ogston, C.M.*

"A thermopile and secondary battery designed by Mr. J. W. Swan for Mr. Ogston is thus described (THE LANCET, April 30th, 1887, page 868):—'These thermopiles are made by Rebicek of Prague. They give an electro-motive force of about one-tenth of a volt per pair of elements—that is, four volts for the four groups, equal, say, to seven or eight Daniell's and three or four Groves' cells, power sufficient to illuminate a small incandescent lamp.' Is there not some great mistake in this comparison of powers? On referring to 'Electricity, its Theory, Sources, and Applications,' by John T. Sprague, second edition, p. 336, table xviii., I find the electro-motive force of the Daniell is set down by Sprague, by Clarke and Sabine, and by De La Rive as volt 1·079. Eight of these cells would therefore give an electro-motive force of volt 8·6, or more than double that of the thermopile. Again, I find on the same authority that Grove's cells give an electro-motive force of volt 1·9, and four of these would give volt 7·6, or nearly double that of the thermopile. This suggests an inaccuracy of description which requires explanation."

I am, Sirs, yours faithfully,

Roscommon County Infirmary, Jan. 31st, 1888. E. T. BLAKENEY.

"SHIPS' COMPANIES AND THE CARE OF INVALIDS."

IN reference to an annotation under this heading which appeared on page 189 in our issue of the 28th ult. we are glad to be able to state, in response to a communication from Messrs. Elder, Dempster, and Co. of Liverpool, London, and Hamburg, that the steamer from which the passengers were landed at Teneriffe in so uncomfortable a manner was not one belonging to the British and African Steam Navigation Company, for which line our correspondents are the agents. Messrs. Elder, Dempster, and Co. assure us that their captains have very stringent instructions on the question of the comfort of all, and especially invalid, passengers, and that if any disregard is paid to those instructions they are most desirous of learning of such occurrence, so as to prevent a repetition.

Mr. Puttinson.—Information on the subject is given in a little book published by Mr. Martindale, and noticed in THE LANCET of Oct. 2nd, 1886. Delahaye of Paris also issues a *brochure*, entitled "Manuel des Injections Sous-cutanées," wh'ch devotes several pages to cocaine as an anæsthetic. Mr. Bernard Pitts' paper, which appeared in our columns on Dec. 24th last, might also be consulted.

Encoms is referred to a letter in our issue of Dec. 6th, 1884, page 1030.

URETHRAL INSTRUMENTS.

To the Editors of THE LANCET.

SIRS,—Your issue of October 29th, 1887, contained a notice of a letter by Dr. D. Campbell Black, to the effect that the instrument I had described in my article in THE LANCET of October 22nd, and in my work on "Stricture of the Urethra," "exactly corresponds to the compound catheter of the late Dr. Andrew Buchanan of Glasgow." Dr. Black's letter concluded with some uncomplimentary remarks about the "inventive propensity." I naturally felt, as I myself was unconscious of any plagiarism, a little irritated. On Nov. 1st I telegraphed to a gentleman practising in Glasgow to make inquiry on the subject. I received his answer on Nov. 2nd. He said:—"Instrument makers ignorant. Inquiries at Royal Infirmary. Will hear to-morrow probably." Messrs. Walters, the instrument makers, wrote to Dr. Thomas of the infirmary to make inquiries. On Nov. 23rd Dr. Thomas wrote: "I have no telescopic catheter for males, but I have one for females. I do not remember ever hearing it called 'Buchanan's' before. Mr. Hilliard, our surgical instrument-maker, could possibly let you have what you require." Messrs. Walters wrote to Mr. Hilliard to ask him to manufacture the instrument, and on December 16th they received the following postcard from that gentleman: "Your order for Buchanan's antique pattern of guide catheter set is in hand, and will be sent without delay." On February 6th, Mr. Hilliard sent the instrument. It is now before me. Any two objects in more startling contrast it is difficult to conceive. Dr. Buchanan's instrument consists of a semicircular metal railway guide, bulbous at both ends, 22½ in. long. It is of No. 2 gauge. With this there are four semicircular metal tubes of gauge, respectively 4, 7, 9, and 12, varying in length 19, 17, 14, and 12 in. It is a ponderous instrument, and resembles in form a boomerang or a crinoline wire. The original idea was certainly that of Mr. Wakley. My instrument is of gum elastic make, and to all purposes an ordinary French bougie, but contains a catheter of smaller gauge (the size of neck), so that when the head and neck of the instrument are through the stricture, and grasped by it, instead of sending the whole instrument on (as, I fear, is too often done, and the mucous membrane wounded), just sufficient pressure is used in order slightly to dilate or open the stricture, and the inner catheter is pushed on with perfect ease, and the outer case, or dilated body, withdrawn. That any medical man, having the diagrams of my compound catheter before him and his own recollection of Buchanan's instrument, even after the lapse of twenty years, should write of a professional brother that his instrument "exactly corresponds" with the latter is to be regretted. I am, Sirs, yours truly,

Chandos-street, W., Feb. 8th, 1888. E. DISTIN-MADDICK.

EPSOM COLLEGE.

To the Editors of THE LANCET.

SIRS,—I cannot see that the treasurer, Mr. Holman, has in any way refuted the statement made in my letter of Dec. 17th, "that the council are forgetting the reasons for which the College was established—viz., to enable medical men to have their sons educated at a reasonable cost." He cannot deny the additions made in the last few years. The College may serve very well for the sons of medical men who have large private incomes, but for the generality of medical practitioners who have to depend on their medical earnings it is fast becoming too expensive. It is not only my own case, but several brother practitioners have been to me about sending their sons to the College, and when I have stated my experience of the cost and the payment in advance, they say it is beyond their means.

Perhaps you may ask what I would have done? My reply is, let the council, when selecting new members to be proposed for election on the council at the annual meetings, recommend two governors for election who are ordinary general practitioners, and who know where the shoe pinches. At present the College does not meet our wants, and must be levelled down if possible.—I am, Sirs, yours obediently,

Jan. 31st, 1888. A MEDICAL PRACTITIONER.

CHASTISING A PATIENT FOR HIS OWN GOOD.

A MEDICAL man was lately charged before a Berlin Court of Justice with assault under the following circumstances:—A woman of the artisan class brought a little boy aged four to be treated. Some local examination was necessary, which, though it could not in the least have hurt the child, caused him to scream and kick so violently that nothing could be done with him. The doctor did his best to soothe the little fellow, but all to no purpose. He then came to the conclusion that the child was crying merely from naughtiness, and, losing all patience, administered a few slaps on the buttocks for the cure of this affection. The mother became very angry, and, snatching up the child, carried him off, subsequently obtaining a summons against the doctor. The court, however, decided that the defendant had slapped the child with the object of doing him good, and therefore discharged the case. A similar charge was brought some time ago against a St. Petersburg medical man in a Russian court by an officer's wife. Here also the court took the doctor's side. Those who have much practice amongst children know how tiresome they can be, especially when they are spoilt and poorly. In these cases it is often found needful to resort to some system of rewards, and even to punishments; but it certainly is not advisable for a medical man to take upon himself to slap a patient, though he may be occasionally sorely tempted to imitate the example of the Berlin defendant. Whether an English court would regard the matter in the same light as the Berlin and St. Petersburg ones seem to have done may be open to doubt.

Tyrol may very probably find Buenos Ayres a good field for practice, as there are many wealthy foreign residents and but a moderate proportion of foreign medical men. The examination, which must be passed, before examiners who cannot be expected to be anxious for further competition, is not easy, and we believe, must be passed in Spanish, though the examiners may probably be mostly Germans.

C. G. C. N. is thanked.

"ELECTRIC ILLUMINATION OF THE MALE BLADDER AND URETHRA."

To the Editors of THE LANCET.

SIRS,—Permit me as Mr. Leiter's friend and agent for Great Britain to comment upon a letter from Messrs. Weiss and Son which appeared in your issue of Feb. 4th. It is there stated that Mr. Leiter's new endoscopes, which were demonstated by Mr. Hurry Fenwick at the Medical Society on Jan. 23rd, were "exhibited at the Medical and Chirurgical Society on March 23rd, 1880, by Sir H. Thompson;" and that "no improvement in the respect of the illumination has taken place in the new instrument." This is incorrect. Mr. Leiter's cystoscope of 1888 is very different in detail from that of 1879, though its exterior is somewhat the same; and although the principle—as Mr. Weiss points out—of illuminating the bladder from within is the same as in the Nitze-Leiter instrument of 1879, yet that principle is now already thirty years old. The Nitze-Leiter electric cystoscope which Sir Henry Thompson showed in 1880 was but a modification of one exhibited by Bruck [illegible] twenty-five years previously, as will be seen in the reference Mr. Weiss quotes.

The practical value of the new cystoscopes over its predecessors of twenty-five years and eight years ago has not been mentioned by Mr. Weiss. The cystoscope of 1880 has long since been discarded, and has not found favour with the profession. The reason for this neglect and the differences between the old and the new cystoscopes are as follows:—1. The Nitze-Leiter cystoscope of 1879 was very complicated. 2. It was very cumbersome, and required a porter for its conveyance (Leiter Electro-endoskopische Instrumente, p. 44, fig. 71). 3. It required much technical knowledge. 4. It was very delicate, and required frequent repairing. I had for long to repair such an instrument nearly every week; for the platinum loop, which had to be very thin, fused very quickly. The instrument belonged to a specialist in Germany, who persevered in its use. 5. It was costly. But the new incandescent lamp cystoscope of Leiter is (1) quite simple in its construction, for the water cooling apparatus has been dispensed with, the carbon filament of an Edison lamp giving three times as much light and evolving much less heat; (2) its accessories have been so reduced that the entire apparatus can be carried in the pocket (Nitze; Langenbeck's Archiv, Bd. xxxvi., Heft 3); (3) it requires no special knowledge; (4) it stands a good deal of wear and tear, it will burn for hours without damage, and when a lamp gets old another can be reinserted in a minute by the medical man himself; (5) it is one-third the price of its old-fashioned predecessor.

Mr. Leiter's new electric urethroscope, which can be adapted to the eye, ear, œsophagus, vagina, &c., is an entirely new invention. The light is reflected from the exterior, and is not cast from the end of the instrument, as was the fashion of the 1879 pattern.

I remain, Sirs, yours obediently,

Wigmore-street, W., Feb. 6th, 1888. K. SCHALL.

Enquiry.—Our correspondent's best plan would be to state beforehand his grievance to A, with an intimation that he intends to state it to the guardians if the appointment be not put on a proper footing.

CARBOLIC ACID POISONING.

A GERMAN pharmaceutical journal, remarking on the great frequency of fatal accidents from taking carbolic acid by mistake, states that these form 90 per cent. of all the fatal cases of taking the wrong medicine, and points out the great importance of always using poison bottles and poison labels for carbolic acid.

AMBULANCE CYCLES.

To the Editors of THE LANCET.

SIRS,—In the article on the Stanley Show in your issue of Feb. 4th you express surprise at the absence of ambulance cycles, and suggest the construction of one on the lines of the Coventry chair. Permit me to say that in October last year I sent to a well-known Coventry firm sketches of three ambulance cycles, two of them being on the principle you suggest—viz., a frame with stretcher in front of the rider extending over the front wheel, and the other with the stretcher beside the rider, or rather riders, as my plan in all cases is to have two riders, placed either tandem fashion or side by side, to diminish the labour and render them independent of outside help, two bearers being able to lift the stretcher on and off and carry it as far as necessary. The firm, however, while saying that there would be no difficulty in the manufacture of such machines, thought there would not be demand enough to make them profitably; so nothing further came of my communication. I have since forwarded sketches to the Cycling Committee now sitting at the Horse Guards, but have not yet heard their opinion. I hope that before long ambulance cycles may be in common use.

I am, Sirs, your obedient servant,

Suffolk-street, S.W., Feb. 7th, 1888. VALENTINE MATTHEWS.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

To the Editors of THE LANCET.

SIRS,—Will you allow me to say that a recent article in an evening paper, to which my attention has been drawn, purporting to describe the work of this hospital, has not been inspired by the authorities here, and that I am ignorant of its source. It would be ungrateful not to acknowledge the kindly spirit which animates the notice; but there are reasons why my board must disclaim responsibility for it, whether as a whole or in respect of certain statements contained in it, which are entirely—though, of course, unintentionally—inaccurate.

I am, Sirs, your faithful servant,

B. BURFORD RAWLINGS.
Feb. 7th, 1888. Sec.-Director.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Haslam, Birmingham; Mr. L. Humphry, Cambridge; Dr. Prosser James, London; Sir E. Lechmere, London; Dr. Saundby; Mr. Thackeray; Mr. Blakeney, Roscommon; Mr. Sterling, Belfast; Mr. Cleary, New York; Dr. Shettle, Reading; Dr. Niven, Oldham; Messrs. Dawson Bros., Montreal; Mr. B. B. Rawlings, London; Dr. Kamerier, New York; Dr. Gooding, Barbadoes; Mr. Corbyn, London; Dr. Donald Hood, London; Mr. V. Richards, Goalundo; Messrs. Dewar and Sons, Perth; Mr. Keegil, Ceylon; Mr. J. W. Smyth; Mr. Stratton, New York; Dr. Thomas, Sheffield; Dr. Lewin, Berlin; Mr. Nicholls, Bury St. Edmunds; Mr. V. Matthews, London; Mr. Wells, Barnard Castle; Dr. B. Kelly, London; Dr. Dudgeon, London; Mr. Thomson, Brussels; Dr. Orchard, Manchester; Mr. Lockwood, London; Mr. J. B. Sutton, London; Mr. Prichard, Bristol; Mr. E. A. Miller, London; Dr. Dukes, Rugby; Dr. Coghill, Birmingham; Dr. Eddowes, Loughborough; Dr. Dwelly, Chard; Mr. Faulkner, London; Dr. Taralisha, Brooch, India; Mr. Baker; Mr. Brown; Mr. Briscoe; Mr. Elliott, Wolverhampton; Mr. Dismore, Loughadian; Mr. Reid; Mr. O'Keefe, Dublin; Mr. Woodhouse, Manchester; Dr. Gooch; Messrs. Churchill, London; Mr. Michael, Caterham; Mme. Moore, Italy; Mr. Bellows, Gloucester; Messrs. Maythorn, Biggleswade; Mr. Wood; Mr. Lerry, Oswestry; Mr. Hope; Dr. Burggrave, Paris; Mr. Moulton; Mr. Doran, Leeds; Mr. Sampson, York; Mr. Unsworth, Liverpool; Dr. Whitmarsh, Hounslow; Dr. James Oliver, London; Messrs. C. Cross and Co., London; Mr. F. B. Jessett, London; Mr. Frost; Mr. Beale, Great Yarmouth; Mr. S. H. Simpson, Romsey; Mr. Immisch; Mr. W. M. Beaumont, Bath; Mr. G. F. Dowdeswell, Gloucester; Mr. R. Scales, London; Mr. Keetley, London; Captain Petrie, London; Mr. Park, Ashton-under-Lyne; Rev. F. Lawrence; Mr. Scott; Rev. W. Rowley, Bampton; Mr. Mayhew, Ipswich; Mr. Holtby, York; Dr. Soper, Dartmouth; Mr. Cooke, Cirencester; Mr. Roberts; Mr. J. Payne, Yarmouth; Mr. Farmer; Mr. Grinling, Burton-on-Trent; Dr. H. Blum, Peath; Mr. R. Roberts, Launceston; Sacerdo; Odd Fellow; Surgeon-Dentist; C. G. C. N.; Income; The Secretary, Hamilton Association; F. Z; B. H. T.; Q.; Juvenis; Alpha; One who has seen Service; Provincial; A Constant Reader; An Asylum Medical Officer; Chester Deaconess Institution.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Croke-Hull; Mr. Glover, Liverpool; Mr. Bond, Newbury; Messrs. Carnrick and Co., London; Mr. Briscoe, Chippenham; Mr. Kirkley, South Shields; Mr. Stenhouse, Glasgow; Mr. Kerr, Halifax; Messrs. Kilner Bros.; Dr. Dobell, Bournemouth; Messrs. Stern, London; Mr. Van Praagh, London; Mr. Christopherson, London; Mr. Beath; Mr. Lerry, Shrewsbury; Mr. Harrison, Harlesden; Mr. Hawley; Mr. Simpson, Ealing; Dr. Bartlett, Coedra, N.S.W.; Dr. Liveing; Mr. H. Branthwaite, Twickenham; Mr. Eversbed, Arundel; Mr. Chambers; Messrs. Down Bros., London; Mr. Brockelbank; Mr. F. J. Gant; Messrs. Slinger and Son, York; Mr. Bercombe, Lincoln; Dr. Cruise; Dr. Fehrsen, Cape Colony; Dr. Steven, Glasgow; Dr. Muneoff, Vejalpore; Dr. Norman Kerr; Mr. Murphy, Cork; Mr. McGill, Ashford; Messrs. Oliver and Boyd, Edinburgh; Dr. Allwright, Maidenhead; Mr. Haley, Wakefield; Mr. Morgan, Lambstraft; Messrs. Squire, London; Dr. Wood, Pontypool; Mr. Hickman, Grantown; Mr. Wormald, Manchester; Messrs. Rimmington, London; Mr. Oswald, London; Dr. Meadows, Leicester; Mr. Woodcock, Bradford; Mr. Yates, Peckham; Mr. Cecil, St. Leonards; Mr. Corbishley, Macclesfield; Mr. Wood; Mrs. Bostock, Belfast; Mr. Hayward, Manchester; Miss Minks, Chelsea; Mr. H. Mason; Dr. Pierroni, Milan; Dr. Pope; M. J., Bedford; O., Yorkshire; X., Strand; B.A.; Omicron; Ozone; G. B.; Cecil; Vaccine Lymph Association, London; Omega; Medicus, Leominster; Chemist; One Hundred; G. V., Derby; Fides; W., Notts; G., Wandsworth; The Beckett Hospital, Barnsley; Lex; M.D., Walthamstow; Pendlebury Hospital; Alpha, Keighley; Daleth; Hontes.

South London Mail, Windsor and Eton Express, Windsor and Eton Gazette, Hertfordshire Mercury, Shrewsbury Chronicle, The Era, Surrey Advertiser, California Exchange and Mart, Advocate of India, Border Advertiser, Lost and Found Gazette, Rotherham Advertiser, Nottingham Daily Guardian, Gardeners' Magazine, Barnet Press, Walthamstow and Leyton Guardian, Neue Zürcher Zeitung, South Wales Daily News, &c., have been received.

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